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ABSTRACT

This annotated bibliography on research in preschool education was prepared as background material for two 1971 symposia on preschool research aims, methods, and problems. The report provides a sample of findings from work done in Western Europe and the United States since 1968. Topics include programs (comparisons, evaluation, continuity, etc) child development, home environment, methodology, skills, teachers, and finance. Confusion among research findings was noted but there appeared to be a swing towards intellectually structured programs with emphasis on the role of preschool education in reducing the disadvantages of low socio-economic status. (ED)

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A DOCUMENTARY REPORT ON RECENT RESEARCH INTO PRE-SCHOOL EDUCATION

PS 004834

"Songe-t-on parfois qu'avant six ans, l'enfant a appris déjà des choses beaucoup plus importantes que celles qu'il apprendra pendant tout le reste de son existence. Il a appris à comprendre et à s'exprimer et cela seul est une acquisition fondamentale qui englobe au moins les trois quarts des difficultés qu'il aura encore à rencontrer.

A six ans, il possède déjà un bagage de connaissances si bien fourni que peut-être rien de ce que le pédagogue ajoutera ne pourra surpasser en valeur ce qui s'y trouve déjà."

DECROLY (1923)

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INTRODUCTION

The Conference of European Ministers of Education has recognised the extreme importance of pre-school education, and the Council for Cultural Co-operation, in order to promote action and co-operation in this field, has given it an appropriate place within its programme of activities. Within the framework of this programme two symposia are being organised. The symposium to be held in Venice in October will be on pre-school aims, methods and problems, and that to be held in Jyväskylä in December will be concerned with research into pre-school education.

The Documentation Centre for Education in Europe has been asked to prepare the present report on recent research to serve as a background paper to the symposia. The report is not comprehensive. It aims rather to give a sample of recent findings in the principal research areas. The report covers research work which has been carried out both in Western Europe and in the United States.

Selection criteria

On account of the fact that there is no common age at which children begin compulsory schooling in Europe, the term "pre-school" covers different age groups in different countries. In this survey of recent research work "pre-school" has been considered to cover the first six years of life.

Those studies concerning children who cannot be considered typical, for example blind, deaf or physically handicapped children, have not been included in the present report. Many of the items do, however, deal with disadvantaged children, but in this case the disadvantage is either of social or economic origin and affects a large proportion of children in the pre-school age range. Research work involving a very small number of children and where the findings are likely to be of specific rather than of general interest has also been left out. The items have been chosen to reflect current trends in research, the majority having been published since 1968, and for the educational implications that their findings hold.

Manner of presentation

In order to facilitate consultation of the survey, the items have been grouped under broad headings - Programmes, Child Development, Home Environment, Methodology, Skills, Teachers, Finance, Overviews and Broad Issues, and Bibliographic Sources. Within certain of these groups there are sub-divisions. This classification is not a rigid one,

and it will be found that certain items are of relevance to sections other than the ones under which they are listed. The section "Overviews and Broad Issues" contains items which take a more general view of the pre-school situation, both in individual countries and at the international level.

Each item is accompanied by a very brief indication of its contents. It will be found that on occasions this summary covers only one aspect of the research findings. Where a choice has had to be made, the aspect having the apparently greatest educational interest has been chosen.

It should be noted that in the case of items taken from the catalogues of the Educational Resources Information Center (ERIC), descriptors, identifiers and indications of price have been omitted.

The pre-school scene as depicted in the research findings of the present survey

The overall view presented by recent research findings is one of confusion. Opinion would appear to be divided on most matters investigated. In trying to derive some guiding principles from recent research, it must be remembered that most of it has been conducted in the USA. The relevance of the findings, as far as the European scene is concerned, may in consequence be somewhat reduced.

Research findings support the view that pre-school education has beneficial results for the children involved, and that these benefits tend to be greater when specially structured programmes are followed (Van De Riet V. and H., Grant Report, 1969; Luckert, 1969). Other research findings, however, point to the fact that any gains made by children through having followed such specially structured programmes tend to disappear once they enter the compulsory school system. Sometimes the gains were found to disappear during the first grade (Diagnostically Based Curriculum, Bloomington, Indiana; American Institute for Research in Behavioural Sciences, 1969), at other times during the third grade (Van De Riet V. and H., Dec. 1969). The reasons why children lose gains achieved during pre-school training, or why those without pre-school experience make up deficiencies they may have had, are not clear. It is possible that gains made are the result of particularly favourable conditions created specially for the pre-school situation and which are not reproduced within the compulsory school system. The Hawthorne effect has also to be taken into consideration.

Opinions vary concerning the length of pre-school programmes. Clasen, Spear, Tomaro (1969) report the value of short programmes, whilst Turner, DeFord (1970) report that the longer the programme the greater the gains achieved (see also Denmark, Guttentag, 1969).

Much recent research has been devoted to children who come from homes having a low socio-economic status. Nurse, Day (1970) indicate that such children obtained higher overall gains as the result of participation in a pre-school programme, but that these gains were not sufficient to bridge the gap between them and children of higher socio-economic status. Di Lorenzo (1969) found that disadvantaged children achieved only very limited gains from the pre-school programmes he investigated. That low socio-economic status carries with it an all-embracing negative influence is questioned by Kunz, Moyer (1969) who report that socio-economic status is not a factor in certain areas of achievement, and Palmer (1968) suggests that up to the age of three years, social class is not a function of performance.

Research would seem to indicate a trend towards academically oriented programmes in which use is made of operant conditioning and programming techniques (see Ulrich, Louisell, Wolfe, 1971; Cooper, 1969). There are those, however, who draw attention to the dangers involved in trying to teach children skills at too early an age and in not heeding maturation (Jensen, 1969). Katz (1971) points out that the use of operant conditioning techniques may lead to a clash of interests between the pre-school and the home. Attention is also drawn to the differing maturation rates of boys and girls of pre-school age (Rubin, 1969).

Those schemes which try to involve the home in the education of the pre-school child are, in general, favourably reported on. Mothers who receive guidance in child-rearing techniques appear to profit as much from their own involvement in an education programme as do their children. They acquire self-confidence, although Badger (1969) found that it was only during the second year of a programme that mothers achieved full confidence in their ability. Litman (1969) emphasises the importance of the quality rather than of the quantity of the mother-child relationship. Hervey (1968), however, found that Head Start had no beneficial effect on the family as a whole.

The use of television in courses designed for disadvantaged children has aroused considerable interest, but again opinions are divided concerning its value. The programme "Sesame Street", whilst being enthusiastically welcomed by some, has had a more reserved reception from others. Television programmes have the disadvantage of not

always reaching the desired audience (see Jordan, 1970), and a programme such as "Sesame Street" may be of reduced relevance when shown in a cultural setting other than that for which it was produced. Reporting on an Appalachia pre-school programme, the American Institutes for Research, Palo Alto, California, report (1970) that television was best used in conjunction with other teaching techniques rather than by itself, and Busse and others (1970) point out that lavish equipment is not a panacea.

As far as individual skills are concerned, it is generally claimed that thanks to specially devised programmes they can be taught at an earlier age than would normally have been expected. A note of caution is, however, sounded by Melcer (1970) who draws attention to the fact that he discovered little generalisation of knowledge to areas where generalisation would normally be expected. In some of the learning situations reported in this survey, the ratio between teachers and taught was extremely low. Smith (1970) indicates that for language work the small group (one experimenter and three children) is preferable to the dyadic pattern (one experimenter and one pupil). The Report of the Central Advisory Council for Education (England) (1967) spoke in terms of one trained nursery assistant for every ten children, and one qualified teacher to 60 places.

There has been relatively little research into the teaching profession itself. Those teachers who have participated in Head Start programmes have tended to have had only a small amount of training. Perhaps too much emphasis has been placed of late on devising and assessing programmes when compared with the amount of research devoted to the teacher. Nimnicht and others (1970) do draw attention, however, to the very obvious fact that the level of a teacher's skill is an important factor in the success of any programme. Little research would also appear to have been undertaken into the financial aspects of pre-school education. Would it be cheaper to pay mothers to stay at home to look after their children? Would it be more economic in large industrial centres to have pre-school education factory based rather than school based? Such questions cannot yet be answered.

The I.B.E. recommendation of 1961

It is now ten years since the twenty-fourth International Conference on Public Education, held in Geneva, agreed on certain guidelines for future development in pre-school education. Some of its recommendations are reproduced below, as it was felt that they are still highly relevant.

"(20) Pre-primary education should use methods which take into account the most recent developments in the psychology of the small child and the progress of educational science; these methods will be based on action, which generally takes the form of play, either free or suggested; the sensorimotor and manipulative activities provided for the children (singing, drawing, rhythmics, etc.) help to awaken their personalities and to give them a sound emotional and mental balance.

(21) Functional and individualised education, which is characteristic of the education of the young child, should not exclude group activities which contribute to character training, the education of the emotions and the development of the social sense.

(22) At pre-primary level, it is important for intellectual education to be based on the observation of the immediate surroundings and the development of oral expression, and, although all formal instruction must be excluded from this type of education, it is possible, from the age of five onwards and in so far as the child shows sufficient maturity and interest, to introduce him to the skills he will learn in school by means of graphic expression, the organisation of concrete situations which can only be solved through the use of measure and number, and the utilisation of specially designed materials.

(23) Adequate time should be reserved for open-air activities and a proper balance should be achieved between free and directed activities.

(24) With the reservation that the above-mentioned principles must be adhered to, teachers at pre-primary level should have wide freedom in their choice of procedure and in the preparation of their programme of activities, while being sure that they have at their disposal sufficiently varied material and all indispensable equipment."

(XXIVth International Conference on Public Education, Geneva, 1961. Recommendation No. 53 to the Ministries of Education

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concerning the Organisation
of Pre-primary Education.
International Bureau of
Education, Geneva.)

When these recommendations are compared with views expressed in the present survey of research, it will be noted that there would appear to have been a swing towards intellectually structured programmes with emphasis being placed on the part pre-school education can play in reducing those disadvantages which low socio-economic status would seem to entail. It is perhaps this above all else which can be considered as characterising our present effort to improve pre-school education.

1.0 PROGRAMMES

1.1 COMPARISON AND ASSESSMENT

ULRICH E., LOUISELL S.E., WOLFE M.: The Learning Village: a behavioural approach to early education, Educational Technology, February 1971, Vol. XI, No. 2, pp 32-45

*USA: Structured learning, positive reinforcement techniques

The purpose of the Learning Village is to accelerate and enhance the development of children by applying scientifically sound educational procedures as soon after birth as possible and by continuing their application for as long as the person remains involved in the educational system. Children and staff of the Learning Village come from a wide range of economic and cultural backgrounds. The programme of the Learning Village, especially of the infant nursery and nursery, allots an unusually large amount of time to the structured learning of academic skills. The terminal behaviours in the Learning Village include proficiency in reading; correct and creative use of language; acquisition of knowledge concerning environment; ability to use basic concepts of arithmetic and mathematics; co-operative, affectionate social behaviour. Positive reinforcement of a child's behaviour is used. An atmosphere of pleasure in learning is sought. The staff/student ratio is 1:5. The nursery school programme has been in operation for only two years, and the infant and elementary for a little more than one year. It is therefore too early to evaluate accurately, but particularly rapid progress has been noted in the area of reading. The staff believe that the results achieved are due primarily to the behavioural methodology used.

HALASA O.: Enrichment approach versus direct instructional approach and their effects on differential pre-school experiences.
Cleveland Public Schools, Ohio. Pub. date March 1970, 11 pp. ERIC ED 043 369 PS 003 132

*USA: Direct instructional strategy more effective than enrichment in fostering basic academic skills; positive effects reduced one year later

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This study represents a segment of an evaluation of the effects of two diametrically-opposed instructional strategies on inner-city kindergarten children who had varying pre-school experiences. The child- and parent-oriented "enrichment" approach was used in one school while the teacher- and goal-oriented "direct instructional" approach was practised in a separate but comparable school. Children randomly selected from both programmes were tested on a variety of measures in October and May. Data were collected on such independent variables as school poverty index (percent of families on welfare), chronological age, number of siblings, ordinal rank of child in family, and school year attendance. Two statistical measures were used: Stepdown Regression Analysis and Analysis of Covariance. Results indicated (1) direct instructional strategy was more effective than enrichment in fostering basic academic skills, (2) effect of pre-school experience one year later was limited to reading scores only, and (3) pre-test scores were the best predictors of children's performance on post-tests of general mental functioning and basic skills.

LUCKERT H.R.: Neue Orientierung in der Vorschulerziehung. Das Lernkonzept der Begabung (La nouvelle orientation de l'éducation pré-scolaire. Le concept de l'aptitude). Schule und Psychologie, 16e année, cahier 1, 1969, pp 25-32

*FEDERAL REPUBLIC OF GERMANY: A structured intellectual approach is needed at the pre-school level

Il faut, dès la petite enfance et progressivement, habituer l'enfant à l'activité intellectuelle. Le développement psychique n'est pas seulement une question de mûrissement intérieur; il dépend aussi en grande partie des excitations reçues en provenance du monde extérieur.

Mais il paraît insensé de réserver la petite enfance aux influences d'ordre émotionnel et social et de rejeter l'apport intellectuel pour un âge ultérieur, alors que ces deux données devraient s'interpénétrer.

D'autre part, le développement de l'intelligence et des aptitudes peut être considérablement favorisé par un enseignement soigneusement organisé à l'âge pré-scolaire et à l'école primaire. Des capacités médiocres peuvent être améliorées par un enseignement approprié dès la maternelle.

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STUART K-G., SVERUD K-A.: Förskoleprojektet (The pre-school project) (Göteborg School of Education) Educational Research European Survey 1970, Vol. I, p. 80

*SWEDEN: Research project into goal directed and moderately structured programmes

Starting date: 1968

Purpose: To develop goal directed and moderately structured learning arrangements and materials for pre-school children aged six.

Procedure: Only part of the total pre-school programme is covered by the project. Priorities chosen: social, linguistic and concept training. The goal analysis within each of these areas has followed the procedure of formulating behaviourally termed goals and hierarchically arranged sub-goals. These goals have guided the development of materials and methods.

VAN DE RIET V., VAN DE RIET H.: A sequential approach to early childhood and elementary education, Phase I, Grant report.
Florida Univ., Gainesville. Pub. date December 1969, 57 pp. ERIC ED 042 617 PS 003 466

*USA: Larger gains among 4-year-olds from a sequential curriculum than from traditional pre-school programmes

The project on which this document reports intends to (1) implement a three-year and a four-year sequential curriculum based upon developmental concepts, (2) change the traditional roles of the teacher and the student, (3) accommodate individual differences in children's levels and learning rates, (4) involve parents in the education and cognitive development of their children, (5) use teacher assistants to free teachers for small group activity, and (6) carry out an extensive evaluation of the children in this programme and compare them with control groups. The sequential curriculum is the Learning to Learn Programme and the subjects are 44 4-year-olds and 42 5-year-olds. The experimental groups were exposed to the Learning to Learn Programme, while the control groups entered a traditional pre-school or kindergarten. At the end of the first year of the project, extensive developmental evaluation indicates larger gains for the experimental groups, especially among the 4-year-olds.

HAGENBUSCH A.M.: Einige Gedanken zur derzeitigen Kindergartenarbeit (Quelques réflexions sur le travail dans les jardins d'enfants à l'époque actuelle) Welt d. Kindes, Dtsch., 1968, 46, no. 2, pp 55-9

*FEDERAL REPUBLIC OF GERMANY: A too heavy emphasis on intellectual training to be avoided

Une formation uniquement intellectuelle fait obstacle au développement harmonieux de l'enfant. Selon la formule de Froebel: "Vivre, agir, connaître doivent être chez l'homme constamment en accord".

SCHULTZE W.: Vorschulerziehung in der diskussion (Pre-school education under discussion). International Review of Education, 1970, XVI(1), pp 23-45

*FEDERAL REPUBLIC OF GERMANY: Froebel's methods recommended

The reform and extension of pre-school education in West Germany has been based mainly on research in English speaking countries, with an emphasis on the importance of environment for developing cognitive abilities. The suggestion is made that this may rob the child of the beneficial influences of a more natural, less restrictive world in the tradition of Froebel.

COX H.R.: Effect of maternal attitudes, teacher attitudes, and type of nursery school training on the abilities of pre-school children. Final report. Catholic University of America, Washington, D.C. Pub. date December 1968, 94 pp. ERIC ED 028 844 PS 001 900

*USA: Value of Montessori methods over traditional nursery school programme, maternal attitudes produced no significant effect on the children's achievement

The purpose of this study was to assess the importance of teacher attitudes, maternal attitudes, and traditional versus Montessori nursery school training on the learning and achievement of the pre-school child. Eighty-two middle class children and thirty-eight disadvantaged children who attended either Montessori or traditional pre-schools comprised the sample. The children were tested in the fall on the Stanford-Binet

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and Peabody Picture Vocabulary Test and re-tested in the spring with the Caldwell Pre-school Inventory and the Stanford-Binet. Teachers of nursery school classes completed the Minnesota Teacher Attitude Inventory, and mothers of the children completed the Maryland Parent Attitude Survey. Results of the study showed that middle class Montessori children scored significantly higher on personal-social responsiveness, associative vocabulary, and total test scores than middle-class children in a traditional nursery school programme. Disadvantaged Montessori children also obtained significantly higher scores than did their counterparts in a traditional programme. Further findings indicated that democratic teacher attitudes were not highly related to pre-school children's achievement and that maternal attitudes had no significant effect on the achievement of these children.

Direct verbal instruction contrasted with Montessori methods in the teaching of normal four-year-old children. Pub. date /69/, 21 pp. ERIC ED 041 619 PS 003 149

*USA: Comparison of Montessori methods and methods of direct verbal instruction

This study compares the effects of Montessori methods of instruction and methods of direct verbal instruction. Montessori methods rely on the ability of the child to learn through physical interaction with inanimate objects and minimise verbal behaviour by teacher and student, while the direct verbal method works mainly through language use, both in the teacher's presentation and the child's responses. In this research project, the Montessori group was made up of 17 upper-middle class 4-year-olds who had already participated in the programme for a year. The direct verbal group, called the Academic Pre-school, was comprised of 18 4-year-olds from backgrounds similar to those of the Montessori group. All the children were pre- and post-tested on the Illinois Test of Psycholinguistic Abilities and post-tested on the Wide-Range Achievement Test (reading, arithmetic and spelling). There were no significant between-group differences at pre-test, and post-test total ITPA scores were about the same as the pre-test scores. The sub-test differences in the second testing favoured the Academic Pre-school on tests involving abstraction and the Montessori group on tests of simple recognition or memory. The Academic pre-school children outscored the Montessori children in all areas of the Achievement Test.

STODOLSKY S.S., JENSEN J.: Ancona Montessori research project for culturally disadvantaged children, September 1, 1968 to August 31, 1969. Final report. Spons Agency - Office of Economic Opportunity, Washington, D.C. Pub. date 31 August 1969, 83 pp. ERIC ED 044 166 PS 003 058

*USA: Limited influence of Montessori methods on I.Q.

This paper, part of a long-term study, reports the effect of a modified Montessori pre-school experience on cognitive development, school-related behaviours, and social interactions and perceptions of disadvantaged children. Each of thirty-five disadvantaged Negro children (31 in nursery classes and 4 in elementary classes) was pair-matched with a middle-class child. In the disadvantaged group, 17 children were attending nursery classes for the first time. Pre- and post-tests were made of cognitive ability, on the Stanford-Binet, Piaget tests of length conservation and sociometric features. Also, children were rated by testers on performance and the teachers rated classroom behaviours. Data from previous years on some of the children were used in reference to long-term change. Part I (nursery school) test results show that neither first nor second-year children significantly increased their I.Q. scores. Both disadvantaged and middle-class children scored similarly on task orientation.

Middle-class children showed more friendship choices forming across social-class lines. Part II (elementary school) results present limited support for the theory that children who continue in Montessori, rather than public, school will show better school achievement. Data included school records of more than 30 children. A future study will investigate diffusion effects on mothers and younger siblings, and testing with measures more directly relevant to Montessori curriculum.

McCONNELL F., HORTON K.B. and SMITH B.R.: Language development and cultural disadvantagement, Exceptional Children, 1969, 35(8), pp 597-606

*USA: Value of language and sensory-perceptual programmes over traditional kindergarten

In a 3-year study directed at the prevention of learning problems in school, the failure to achieve, and the subsequent school drop-out, a daily programme of language and sensory-perceptual instruction was provided to children enrolled in two community day care centres. The

programme was designed to counteract the inhibiting effects of cultural deprivation on language and perceptual learning during the important formative pre-school years, and thus it placed emphasis on beginning education with the nursery age child. Preliminary results from the first two years demonstrated significant gains in intellectual, linguistic and perceptual functioning in comparison to control groups which did not undergo the same instruction but which were receiving many elements of the traditional kindergarten type programme.

HOENISCH N., NIGGEMEYER E. and ZIMMER J.: Vorschulkinder (Children in pre-school classes). Klett Verlag, Stuttgart, 1969, 239 pp.

*FEDERAL REPUBLIC OF GERMANY: German pre-school classes based on American models

This is a report on the pre-school classes for 5-year-olds in the German/American John F. Kennedy School in West Berlin. The programmes are based on American models which were adapted to the local conditions. Emphasis is given to a progressive training in learning and to creative games. The experience gained with these pre-school classes which have been in existence for a number of years is commented upon and evaluated under pedagogical, psychological and sociological aspects.

WILDAUER G.: Zur Entwicklung der geistigen Taetigkeit im Vorschulalter (On the development of cognitive activities in pre-school age). Volk und Wissen, Volkseigener Verlag, East Berlin, 1968, 156 pp.

*DEMOCRATIC REPUBLIC OF GERMANY: Enrichment programmes

This report on a number of research projects carried out in the German Democratic Republic deals with the possibilities of enriching pre-school education by introducing the children to the techniques of analysing and synthesising concepts in a way which corresponds to their age. The experimental groups were given tasks like measuring quantities and comparing shapes and sizes. The children in the experimental groups differed significantly from children in the control group which were taught by traditional methods. Finally, a number of practical recommendations for enriching pre-school programmes are given.

HILLEBRAND M.J.: Zum Problem der Vorschulerziehung (Contribution au problème de l'éducation pré-scolaire). Westermanns Pädagogische Beiträge, 22e année, cahier 7, juil. 1970, pp 341-351

*FEDERAL REPUBLIC OF GERMANY: Children need programme enrichment from the age of 3 years

Certaines conceptions de la petite enfance devraient être révisées intellectuellement. Le petit enfant ne se développe pas uniquement à partir d'un processus de maturation intérieure. Il a besoin d'incitations venant de l'extérieur. D'où l'importance du milieu socio-culturel qui l'entoure. Il a déjà le goût d'apprendre et d'améliorer ses performances. Compte-rendus d'études sur les possibilités d'enfants d'âge pré-scolaire: l'enseignement précoce de la lecture développe leur vocabulaire, leurs capacités cratoires et l'aptitude à penser en phrases claires et simples. En calcul les enfants de 2 à 3 ans sont déjà accessibles à la notion de quantité. Les jardins d'enfants pourraient être bilingues. Il semble donc nécessaire d'encourager l'acquisition progressive de savoir-faire de base par les enfants dès l'âge de 3 ans. Le fossé entre les milieux socio-culturels différents sera en partie comblé.

REIDFORD P., BERZONSKY M.: Field test of an academically oriented pre-school. Elem. Sch. J., USA, 1969, 69, no. 5, pp 271-6

*USA: Positive value of academic pre-school programme

Etude consacrée au programme de Bereiter et Engelmann, qui repose sur la prémisse qu'une éducation pré-scolaire peut éliminer ou grandement réduire les dommages subis par les enfants du fait de leur entourage. L'application de ce programme améliore le quotient d'intelligence et stimule le développement de la faculté de raisonner.

BEREITER C., ENGELMANN S.: Effectiveness of direct verbal instruction on I.Q. performance and achievement in reading and arithmetic. Academic Pre-school, Champaign, Ill. Pub. date [67] 32 pp. ERIC ED 030 496 PS 002 020

*USA: Reduced gains in second year on account of poor programmes

This experiment was based on the assumption that the academic failure of the disadvantaged or middle-class child is due to a failure of instruction and that if

above-normal learning schedules were maintained, the second year of an enrichment programme would not show the customary drop in gains from the first year. The subjects of this study were 43 disadvantaged Negro and white 4-year-olds of high, middle, and low intelligence. Fifteen of the children were placed in an experimental group (I) and 28 in a control group (II). A 2-year programme involving a group (III) of middle-class 4-year-olds was also conducted, with a control group (IV) consisting of middle-class 4-year-olds in a Montessori pre-school. Groups I and III received a 2-year experimental programme in which rapid attainment of basic academic concepts was emphasised. Group II received a 2-year traditional pre-school education. Group I achieved significantly greater Stanford-Binet I.Q. gains than Group II and maintained them over the 2-year programme. Group III children also benefited measurably from the programme and demonstrated greater achievement in many areas than Group IV.

WEIKART D.P.: Comparative study of three pre-school curricula.
State University of New York, Ithaca. Coll. of Human Ecology at Cornell University. Pub. date March 1969, 18 pp. ERIC ED 042 484 PS 002 981

*USA: Little difference in the value of programmes; importance of the teachers' ability

This project was designed to compare three pre-school curricula, with staff model and programme operation held constant. The curricula were (1) a unit-based curriculum emphasising the social-emotional development goals of the traditional nursery school, (2) a cognitively-oriented curriculum developed by the Ypsilanti Perry Pre-school Project, and (3) the Bereiter-Engelmann language training curriculum. All three of these programmes have carefully planned daily activities and clearly defined week-by-week goals. The subjects for the study were 3- and 4-year-old functionally retarded disadvantaged children. There was a no-treatment control group. Teachers conducted classrooms and home teaching sessions within the curriculum style they chose. The results of pre- and post-test tests (including the Stanford-Binet and Peabody Picture Vocabulary Test) are highly unusual. The gain scores of the treatment groups are remarkably high (significantly higher than the control group's scores), but there is no significant difference in scores among the three different curricula suggesting that the variables held constant in this experiment (staff model, method of project operation and specific task orientation of the curricula) are at least as important as curriculum content in producing favourable developmental gains.

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EDWARDS J., STERN C.: A comparison of three intervention programmes with disadvantaged pre-school children. University of California Head Start Research and Evaluation Centre. Final report 1968-69. California University, Los Angeles, Centre for Head Start Evaluation and Research. Pub. date August 1969, 153 pp. ERIC ED 041 616 PS 002 961

*USA: Positive value of task-oriented structured programmes and of experienced teachers

To aid in providing remediation for the language and cognitive skills of disadvantaged children, the UCLA Head Start Research and Evaluation Centre compared three language programmes: the UCLA Pre-school Language Programme, the Behavioural Research Laboratories' Readiness for Language Arts Programme, and an unstructured Placebo Workshop Programme. Each of the subjects, 163 4-year-old Head Start children, was randomly assigned by sex to one of the programmes. A no-treatment Head Start group was used for control. Subjects were pre- and post-tested on the Peabody Picture Vocabulary Test, the Caldwell Pre-school Inventory, the Gumpgookies, the Behavioural Research Laboratories no. 1, the Visual Discrimination Inventory, and the UCLA Early Childhood Language Tests for Four-Year-Olds. Experimental treatment extended over 24 weeks, 12 in each of 2 semesters. Testing results (104 subjects) revealed that the subjects in the two task-oriented structured language programmes were superior in performance to both Placebo and Control groups. Although the UCLA and BRL programmes differed in content, activities, and materials, results were similar. Afro-Americans did less well than Anglo- or Mexican-Americans, girls slightly better than boys, and subjects with experienced teachers did better than those with inexperienced teachers.

DENMARK F.L., GUTTENTAG M.: Effect of integrated and non-integrated programmes on cognitive change in pre-school children, Perceptual and Motor Skills, 1969, 29(2), pp 375-380

*USA: Length of programme alone related to cognitive change

Compared 63 cognitively disadvantaged, Negro, 4-year-old children in four intervention programmes with controls before and after treatments. Neither differences in programme content nor the presence of white, middle-class children were significant in determining cognitive improvement. Duration of programme alone was related to cognitive change.

1.2 LASTING GAINS FROM PRE-SCHOOL EDUCATION

HERMAN H., ADKINS D.C.: Hawaii Head Start evaluation follow-up - 1968-69. Final report Hawaii University, Honolulu, Head Start Research and Evaluation Centre. Pub. date January 1970, 47 pp. ERIC ED 042 515 PS 003 456

*USA: Progressive increase in I.Q. over a two-year period

This study compared the performance of kindergarten children who had participated in a full-year Head Start programme (FYHS) with that of children who had attended summer Head Start (SHS). FYHS subjects at each of two elementary schools were selected at random from eligible applicants. SHS comparison groups were made up primarily of children from the same initial lists of subjects. On a group of measures administered about 8 months after completion of the Head Start programmes, no significant differences were shown between FYHS and SHS children, or between the two elementary school groups. SHS children, however, earned significantly higher I.Q. scores at the end of kindergarten than they had early in Head Start, and FYHS children showed a significant progressive increase in I.Q. over a 2-year period covering Head Start and kindergarten. This continuous increase in I.Q. is noteworthy, since previous studies have found a levelling-off effect following an initial gain in Head Start.

CLASEN R.E., SPEAR J.E., and TOMARO M.P.: A comparison of the relative effectiveness of two types of pre-school compensatory programming, The Journal of Educational Research, Volume 62, Number 9, May-June 1969

*USA: Effectiveness of short-term specific programmes; resulting advantages persist

Thirty 5-year-old children from low-income families were assigned at random to two treatments during an 8-week, 3 hour-a-day, Head Start programme: (1) the language group received an intensive language experience based upon the Peabody Language Development Kit; (2) the second group received a more conventional socially oriented programme with only incidental attention to language skill building.

This study revealed that a short-term (8-week) programme can result in a significant improvement in the linguistic skills of children from low-income families, and

that intensive language training will result in better linguistic performance than a more general programme as reflected by the measures taken.

The fact that there could have been a significant gain in psycho-linguistic skills as measured by the Illinois Test of Psycholinguistic Abilities without a significant gain in measured intelligence, was unexpected since many Head Start studies claim rather dramatic changes in I.Q. when disadvantaged children make academic progress in the pre-school setting. The superior progress of the language group in linguistic skill development is another indication that the product of the pre-school is a function of that pre-school's philosophy, that is, children will, to an extent, become that which they are trained to become.

The net advantage resulting from the process of intensive language training appears to persist over time, even though the net score on a test may deteriorate.

Finally, the kind of programme utilised to help children make up deficiencies does make a difference. The children who were given the intensive language training continued to exhibit superior skills in linguistic exercises (after a year of no special additional training) when compared with students who had been given a more typical pre-school experience which emphasised socialisation.

The implications would seem to be that conventional pre-school programming as compensatory training produces marked results but that focused programming produces results which are superior to conventional programming in those skills which were the focus of the programme.

Project Breakthrough: a responsive environment field experiment with pre-school children from public assistance families.
Cook County Department of Public Aid, Chicago, Ill.
Pub. date 1 August 1969, 256 pp. ERIC ED 037 481
UD 009 501

*USA: Positive value of short programmes

This is a report on the research evaluation of an educational programme for very young children initiated under the conviction that adult illiteracy might be prevented through intervention into the "cycle of poverty". The method of intervention was to provide a group of pre-school children from public assistance families with a training experience which would better prepare them for entry into formal school setting, reduce likelihood of dropping-out, and thereby help them to function better on

reaching adulthood. A computerised electric typewriter, the Edison Responsive Environment Talking Typewriter, was used to allow the children to move to more complex materials programmed and presented to them after initial familiarisation with the keyboard and alphabet at random. The major thrust of the research evaluation was to determine whether this training could positively influence the children's knowledge and skill with respect to verbal fluency, reading ability, and language development. From the evaluation emerged the chief finding that very young children from poor families can be helped before they enter a formal school experience; in a remarkably short period of exposure, the Talking Typewriter training prepared a group of pre-kindergarten youngsters for first grade work.

TURNER R.V., DeFORD E.F.: Follow-up study of pupils with differing pre-school experiences. Pub. date March 1970, 8 pp. ERIC ED 042 810 TM 000 093

*USA: The longer the duration of pre-school experience the higher the achievement recorded

A follow-up study of the Early Childhood Education Project (ECEP) was conducted in Richmond, Virginia to determine the effects of pre-school experiences on selected aspects of pupil performance at the beginning and completion of grade 1. ECEP is a Head Start type programme organised for the regular school year. The sample was divided into three groups: a random sample of children who entered kindergarten with no prior organised pre-school experience, pupils who participated in the regular ECEP session, and pupils who participated in both the ECEP and the Summer Head Start programmes. The groups were compared on learning readiness on entering grade 1, academic achievement at the end of grade 1, and certain behavioural characteristics, including intellectual abilities, leadership abilities, aggressive behaviour, and withdrawn behaviour as observed at the end of grade 1. The longer the duration of the pre-school educational experience, the higher the scores on the Metropolitan Achievement test; reading and arithmetical concepts and skills gaining most. Results of both standardised tests and teacher ratings indicated that pre-school experiences improved academic readiness and performance.

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1.3 HIGHER GAINS BY DISADVANTAGED CHILDREN

NURSS J.R., DAY D.E.: Development of grammatical structures in pre-school age children. Pub. date March 1970, 6 pp. ERIC ED 042 485 PS 003 134

*USA: Upper-class children obtain higher scores; lower-class children obtain higher gains

The purpose of this study was to describe the level of language maturity and the effect of a pre-school language programme on the language development of urban, Southern 4-year-olds. The 147 subjects (57 lower status blacks, 40 lower status whites, and 50 upper status whites) all participated in five-day per week pre-kindergarten programmes. Dependent variables were measured by use of the Day Language Screen and the Brown, Fraser, Bellugi Test of Grammatical Contrasts. The Day Language Screen measures proficiency in certain receptive and expressive aspects of standard American English, while the Test of Grammatical Contrasts assesses ability to imitate, comprehend, and produce selected grammatical structures. Analysis of the Language Screen data revealed that, while no significant sex or sex-status-race interaction effects occurred, there were significant status-race effects on pre-test, post-test, and gain scores. Upper-class subjects had higher pre- and post-test scores, but lower class subjects of both races had larger gain scores. The upper-class group scored significantly higher on all three tasks of the Test of Grammatical Contrasts, while, between the two lower class groups, the whites scored higher on the comprehension task, blacks on the imitation, and there was no significant difference on the production.

NURSS J.R., DAY D.E.: Development of grammatical structures and attributes in pre-school age children. Final report.
Emory University, Atlanta, Ga.; Massachusetts University, Amherst School of Education. Pub. date January 1970, 83 pp. ERIC ED 041 639 PS 003 661

*USA: Higher gains from a remedial language programme by lower status groups

This study examined several aspects of language development in young children. Base line data was gathered from Southern urban higher status white and lower status white and black 4-year-olds on measures of: (1) proficiency in certain aspects of standard American English, (2) use of attributes in description, and (3) ability to imitate, comprehend, and produce selected

grammatical structures. A total of 147 children attending pre-school classes were pre- and post-tested on the Day Language Screen and the Brown, Fraser, Bellugi Test of Grammatical Contrasts. Data were also collected concerning the language programme in each of the classrooms and the demography of the subjects. The results indicate that there are status-race differences in the development of language skills in 4-year-olds, with the higher status white group scoring significantly higher in all three categories on the pre- and post-tests. However, the two lower status groups had significantly greater gain scores, indicating that the remedial language programme used in their classes improved their proficiency in standard American English and raised their level of language maturity. It is suggested that direct instruction in language skills be given to the lower status pre-school child, in an effort to avoid later reading difficulty.

VANE J.R., DAVIS W.M.: Factors related to the effectiveness of pre-school programmes with disadvantaged children, The Journal of Educational Research, Volume 64, Number 7, March 1971

*USA: Programmes more beneficial to children with lower I.Q.s than to those with higher I.Q.s

Although intelligence testing has been criticised because some feel it has led teachers to have lower expectations of some children, the critics do not mention that test results often indicate that many disadvantaged children have more ability than expected. The results of the present study indicate that compensatory pre-school programmes might be more effective if the programmes were planned to meet the needs of children who represent a broader range of intellectual potential than many expect to find in groups of disadvantaged children.

This study of a group of disadvantaged children (361) who attended a summer Head Start programme indicated that many of the children made gains in tested I.Q. and that many of the children had higher measured intellectual ability than is usually expected. It is also indicated that children with lower measured I.Q.s seemed to benefit most from the programme, whereas children with higher I.Q.s showed less gain as measured by a re-test at the end of the programme. Teachers of pre-school programmes should be encouraged to offer more individualised learning opportunities so that the needs of children of varying degrees of ability may be enhanced.

DI LORENZO L.T. and others: Pre-kindergarten programmes for the disadvantaged: A third-year report on an evaluative study.
State University of New York, Albany, State Educational Department. Pub. date December 1968, 28 pp. ERIC ED 030 541 RE 001 832

*USA: Pre-school programmes of benefit to the disadvantaged but not to the advantaged

Results of ESEA/Title I programmes designed to prepare educationally disadvantaged children for school in eight New York state school districts are contained in the 3-year report on a total population of 1,805 children. Standardised intelligence and readiness tests given at the beginning and end of pre-kindergarten were used to determine the effectiveness of the programmes. It was found that such programmes were beneficial for disadvantaged but not for non-disadvantaged participants, that certain programmes stressing language development were most beneficial, that programme effectiveness increased over the three years, that boys and girls benefited equally, that disadvantaged white children benefited more than did disadvantaged non-white children, and that no significant interaction occurred between sex and race. A study of standardised test scores after the kindergarten year showed a continuance of these effects.

1.4 RESERVATIONS EXPRESSED CONCERNING THE VALUE OF PRE-SCHOOL EDUCATION

DI LORENZO L.T.: Pre-kindergarten programmes for educationally disadvantaged children. Final report. New York State Education Department, Albany, Office of Research and Evaluation. Pub. date December 1969, 254 pp. ERIC ED 038 460 UD 009 923

*USA: Pre-school programmes of only limited value to the disadvantaged

This report presents the results of a study from July 1965 to July 1969 on the effects of year-long pre-kindergarten programmes for disadvantaged children involving eight school districts in New York State and approximately 1,800 children. The study focused on factors which the schools considered important and major objectives of their programmes. These were intelligence, language, self-concept, and physical development. The study was a true experimental design with two replications. The basic data were collected by individualised tests and measurements (pre-test and post-test) for the pre-kindergarten year for

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three waves of children. Post-testing was completed in the follow-up years. Reports and ratings by teams of observers, as well as teachers and programme directors, were made in each of the three years. Each child's parent was interviewed. The cognitive programmes were able to close some of the gap between disadvantaged and non-disadvantaged children. However, the difference that remained exceeded the difference overcome. Further, the results were achieved only by the cognitive-oriented programmes, and not by the nursery-oriented or early childhood-oriented programmes.

LAY M.: The effect of supplementary small group experience on task orientation and cognitive performance in kindergarten children. A final report of the kindergarten 'Learning to Learn' programme evaluation project.
Syracuse University, N.Y., Syracuse Centre for Research and Development in Early Childhood Education. Pub. date 1969, 71 pp. ERIC ED 039 948 PS 003 282

*USA: Little advantage derived from sequentially-arranged programmes and from expressive activities

A study was done to see if a teacher-guided, sequentially-arranged programme of instruction for kindergarten children used in addition to a regular classroom programme is more effective in producing general intellectual gains and specified behavioural characteristics than two instructional alternatives. These alternatives were (1) participation in a regular kindergarten programme or (2) participation in a special programme of expressive activities (such as finger painting, block play) in addition to a regular kindergarten programme. Subjects were 104 disadvantaged kindergarten children. Each instructional group had approximately 30 hours of actual contact time. The Stanford-Binet and the Peabody Picture Vocabulary Test (PPVT), were used to measure intellectual functioning, and experimental task situations were used to obtain measures of attention, visual retention, visual discrimination, task persistence, divergent uses, and classification. Results did not support theories on the advantages of sequential instruction or a special programme of expressive activities in addition to the regular classroom programme. Appendixes describe the programmes and give test data for subjects.

LICHTENWALNER J.S., MAXWELL J.W.: The relationship of birth order and socioeconomic status to the creativity of pre-school children, Child Development, 1969, 40(4), pp 1241-1247

*USA: Pre-school alone will not raise the level of the creativity of lower-class children to that of middle-class peers

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Measured the creativity of 68 middle- and lower-class Caucasian pre-schoolers by an object-identification originality test. The Mann-Whitney U test was employed to analyse differences, with a confidence level of .05. 1st-born and only children were significantly more creative than later-born children. Middle-class children were significantly more creative than lower-class children. It is concluded that enrolment in a pre-school programme alone is not sufficient to increase the creativity of lower-class children to the level of their middle-class peers.

WEIKART D.P. and others: Longitudinal results of the Ypsilanti Perry pre-school project. Final report. Volume II of 2 volumes.
High/Scope Educational Research Foundation, Ypsilanti, Mich.; Ypsilanti Public Schools, Mich. Pub. date August 1970, 189 pp. ERIC ED 044 536 AA 000 638

*USA: Increases in cognitive ability disappear by the third grade; other gains maintained

The Ypsilanti Perry Pre-school Project was an experiment to assess the longitudinal effects of a 2-year pre-school programme designed to compensate for functional mental retardation found in some children from disadvantaged families. The programme consisted of a daily cognitively oriented pre-school programme and home visits each week to involve mothers in the educative process. The project was initiated in September 1962 and the phase covered in this report was terminated in June 1967. The 58 experimental and 65 control black children participating were economically and educationally disadvantaged. Instruments used to evaluate the project included a variety of intelligence and performance measures, several parental attitude instruments and teacher rating scales. Data were collected on home background, birth complications, cognitive, achievement and socio-emotional variables. Children who participated in the programme obtained significantly higher scores than control group children on measures of cognitive ability and achievement and received better teacher ratings on academic, emotional and social development. The significant difference in cognitive ability disappeared by third grade but other gains were maintained.

VAN DE RIET V., VAN DE RIET H.: A follow-up evaluation of the effects of a unique sequential learning programme, a traditional pre-school programme and a no treatment programme on culturally deprived children. Final report.
Florida University, Gainesville. Pub. date December 1969, 35 pp. ERIC ED 042 516 PS 003 461

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*USA: Pre-school gains peter out by the end of the third grade

This is a follow-up study of second and third grade children who experienced differential treatment during their kindergarten year. A total of 72 disadvantaged black children comprised the sample which was divided into three groups. Group A received a special sequential Learning to Learn Programme. Group B participated in a traditional kindergarten and Group C remained at home. At the end of the year, all subjects enrolled in a regular public school first grade. Developmental measures of the children taken periodically during the four-year study included the Stanford Achievement Test, sub-tests of the Wechsler Intelligence Scale for Children and the Illinois Test of Psycholinguistic Abilities. Early results revealed that the Learning to Learn Programme accelerated the children's development, that the regular kindergarten group maintained their previous developmental level, and that the no-programme treatment group fell behind in overall development during the kindergarten year. However, later results indicated that while the three groups maintained their order of mean developmental level, the differences among them decreased through the years, until, by the end of the third grade, differences were no longer statistically significant.

KARNES M.B. and others: A longitudinal study of disadvantaged children who participated in three different pre-school programmes.
Illinois University, Urbana, Institute of Research for Exceptional Children. Pub. date [1968], 26 pp. ERIC ED 036 338 PS 002 884

*USA: Positive effect of specific programmes diminishes with time

This 3-year study made a longitudinal comparison of three types of pre-school intervention programmes. The Traditional approach (two classes of 15 students and three teachers each) worked in conventional ways to improve personal, social, motor and general language development; children were placed in a regular public school kindergarten the following year. The Ameliorative approach (two classes of 15 students and three teachers each) emphasised language development through small group lessons using verbalisations and concrete manipulation. The next year children entered regular kindergarten but continued additional 1-hour-a-day supportive work. The Direct Verbal approach (one class) utilised intensive oral drill in verbal and logical patterns and minimised visual and manipulative materials,

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continuing this approach the following year. During the pre-school year, children in the Ameliorative and Direct Verbal approaches both made more progress than the Traditional group. During the kindergarten year, only the Direct Verbal approach showed continued progress. At the end of the third year, the losses experienced by the Direct Verbal and Ameliorative groups resulted in non-differentiated performance in intellectual and language functioning among the three groups. Ameliorative and Direct Verbal groups were superior to the Traditional in school achievement.

Diagnostically based curriculum, Bloomington, Indiana; one of a series of successful compensatory education programmes. It works: Pre-school programme in compensatory education. American Institute for Research in Behavioural Sciences, Palo Alto, California. Pub. date 1969, 40 pp. ERIC ED 027 978 PS 001 905

*USA: Positive effects of pre-school disappear during the first grade

The purpose of this study was to develop and evaluate a diagnostically based curriculum for disadvantaged pre-school children. For each of three years, 45 lower-class Appalachian white 5-year-olds were equally divided into three groups. The experimental pre-school group (EPS) received a structural curriculum designed to remedy specific, diagnosed deficits in language development, fine motor co-ordination, concept development, and socialisation. Two contrast groups were used. The kindergarten contrast group (KC) received a traditional kindergarten programme, while the "at home" contrast group (AHC) received only the pre-testing and post-testing given to all groups. The experimental curriculum was annually revised to benefit from the past experiences. When the data from the populations of 3 years were combined, they revealed that in the intelligence category, the EPS mean was significantly greater than either the KC or AHC mean, and the KC mean was significantly greater than the AHC mean. Testing during the first grade, however, showed that the EPS and KC had stabilised in I.Q. by the end of their pre-school year, but the AHC group gained enough in the first grade to cancel the I.Q. differences that formerly existed.

MARTIN J.H.: Technology and the education of the disadvantaged. Spons Agency - Office of Education (DHEW), Washington, D.C. Pub date November 1968, 23 pp. ERIC ED 031 293 PS 001 967

*USA: Techniques to avoid the purely short-term nature of gains

Educational intervention programmes involving disadvantaged children have not sufficiently succeeded in the remediation of their academic deficiencies. Gains made appear to be very short-term and generally unimpressive. Accepting the assumption that the deficiencies are not genetic, one is led to suspect the adequacy of the educational system. Educational technology suggests the following changes: (1) the abandonment of the lock-step procedure for group learning in favour of individual learning and self-pacing, (2) change of the student role from passive to active, (3) the stressing of language learning (that is, talking, reading, and writing), (4) rapid feedback to the students, and (5) change of the motivation for learning from an exercise in competition to a joy in self-enlightenment and discovery. These changes should be made through emphasis on multi-sensory learning and learner manipulation of the learning environment.

MELCER D.: Results and implications of a Head Start classification and attention training programme. Michigan State University, East Lansing. Pub. date March 1970, 19 pp. ERIC ED 045 182 PS 003 430

*USA: Little generalisation of knowledge by children to related areas of cognitive ability

This report presents the results, statistical analysis and implications of classification and attention training curricula field tested with Head Start children by their teachers. Teacher, location of programme, and treatment were the variables considered but only treatment effects were significant. Results, summarised in three levels, indicate (1) on some intellectual dimensions, Head Start pupils made gains regardless of the type programme in which they participated, (2) specific treatments across experimental groups produced task specific gains, and (3) pupils learn operations but they do not generalise these acquired abilities to other theoretically related areas of cognitive activity. Implications are that a comprehensive Head Start programme must begin with an assessment of specific learning needs followed by the use of curricula designed to meet these needs. An approach which begins with perceptual motor manipulation, proceeds to attention training, and concludes with classification training might be more successful than any of its predecessors.

SKINNER A.E., CASTLE R.L.: 78 battered children: A retrospective study.
National Society for Prevention of Cruelty to Children, London (England). Pub. date September 1969, 24 pp. ERIC ED 043 382 PS 003 427

*UK: The maltreated child: negative effect of welfare workers with no specific treatment goals to offer

The National Society for the Prevention of Cruelty to Children financed this study of the battered-child syndrome and provided case study data on a sample of 78 battered children under the age of 4 years, from low socio-economic status families. Case study information was transferred to a pre-coded questionnaire. Tables of demographic and medical data on parents and children are included in this report. Fifty-six percent of the children in the sample were less than a year old, emphasising that risk occurs at a very young age. Study findings indicate that relatively minor bruises and facial trauma often signal the beginning of increasingly violent injury, avertible by early diagnosis and intervention. In families where the first childwas battered, chances were 13 to 1 that a subsequent child would be injured. The reliability of previous suggestions that one child is often singled out for battering is therefore questionable. The parents appeared to have long-standing personality problems (habitually aggressive and/or emotionally impoverished) heightened by the demands of parenthood. Too frequent observation of battering families by many workers without specific treatment goals can increase family stress and is not in the child's interest. There is a great need for earlier recognition and protection of the battered child and for therapeutic services for the parents.

1.5 PROBLEMS IN EVALUATION

DATTA L-E: A report on evaluation studies of project Head Start.
Spons Agency - Office of Economic Opportunity, Washington, D.C. Pub. date 1969, 26 pp.
ERIC ED 037 239 PS 002 825

*USA: Need to isolate those factors which allow children who have not followed a pre-school programme to reduce the gains made by those who have

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Evaluation of Head Start has been based on four sources of information: (1) census surveys of children and families served and programmes offered, (2) special research, projects on child development and experimental programmes, (3) a longitudinal study of the development of low income children, and (4) a series of national evaluation studies. Available data appear to indicate that Head Start and other pre-school programmes have an immediate impact, but little is known about why, or under what circumstances optimum results may be obtained. Sustained gains are still being sought. Children who have not attended pre-school programmes tend to catch up in primary school with attenders, but little is known about why this happens. A planned variation study is in progress comparing children in sponsored Head Start and sponsored Follow-Through classes and children attending "regular" Head Start and "regular" primary schools. Head Start evaluations have tried to locate programme variations other than administrative which may affect child development. Considering the evidence now available, the assumptions on which Head Start was based still seem tenable. Research is needed to clarify relationships between programme and child variations, and the effects of long-term interventions.

BROWN R.I., SEMPLE L.: Effects of unfamiliarity on the overt verbalisation and perceptual motor behaviour of nursery school children, The British Journal of Educational Psychology, November 1970, Volume 40, Part 3, pp 291-298

*UK: Effect of unfamiliarity on the testing situation

Children subjected to unfamiliar social and physical conditions show considerable handicap in terms of motor perceptual and language behaviour. It is also apparent that individuals who are placed in unfamiliar environments show behaviour very similar to that found in animals submitted to strange and fear-provoking situations. The graphical data and the statistical analysis indicate that such behaviour lessens from one day to another. Nevertheless, there are still differences in performance after three consecutive days in the unfamiliar environment, though the difference between the groups lessened to a considerable degree. It is interesting that individuals, who have become familiar with the tester and the tests being presented to them, and have been responding in a familiar environment, over a period of four days show significant loss in performance and increase in gazing and freezing behaviour, when changed to an unfamiliar room with the same familiar test and tester.

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These results suggest that children who are subjected to tests at a pre-school age in a clinic are likely to perform well below their optimum score. It may be argued that this is taken into account in the standardisation of the tests. If it could be shown that children who are disturbed show poorer adaptation to unfamiliar conditions than other children, this argument would be to some degree inappropriate. This possibility is supported by the fact that children from adverse home environments show greater attention problems in experimental situations than subjects from less adverse conditions. It would seem of some importance that a psychologist who is examining the performance of pre-school children, particularly those from a deprived background, should examine behaviour under familiar conditions in order to gain a sample of optimal language and perceptual motor behaviour. It is suggested that these results indicate that the tester should get to know the child in a familiar environment prior to testing and should, wherever possible, carry out testing within that environment. The results underline the fact that children who are changed from one place to another, to new homes, new classes, or other strange places, are likely to show variations in several aspects of their performance over a considerable period of time, and to indulge in behaviour which may seem abnormal.

GORDON E.W.: Problems in the assessment of intermediate-range effects of Head Start programmes.
Pub. date May 1968, 22 pp. ERIC ED 037 502
UD 009 698

*USA: Need for more rigorous research to enable the value of Head Start programmes to be assessed

More carefully controlled research distinguishing more facets which may influence cognitive and social performance in young children is considered necessary before Head Start or any pre-school programme can be adequately assessed. Shortcomings in evaluation methodology discussed are as follows: evaluation research has not addressed itself to programme input variables; pre-school children are often evaluated as a homogeneous population; a disproportionate emphasis has been placed on cognitive development while ignoring the equally important and interrelated affective domain; studies of cognitive development have been too dependent on intelligence and achievement tests; and, pre-school programmes have been relied on too heavily as the only means of intervention. Wolf and Stein's (1966) follow-up research project on the effects of Head Start programmes for Puerto-Rican, black, and non-Puerto-Rican white children in New York City is presented as a study which raises important issues in

research methodology. Reviews of studies of cognitive development are presented, which support the theory that the degree of progress made by Head Start graduates and children without pre-school experience can invariably be related to a child's base level of function. Problems of evaluating teacher influence and other variables of the affective domain are also discussed.

1.6 CO-OPERATION BETWEEN PRE-SCHOOL AND THE FIRST STAGE OF COMPULSORY EDUCATION

JORGENSEN P.S.: Kajerodforsoget (L'expérience de Kajerod), Dansk Paedagogisk Tidsskrift, number 4, March 1969, p 162

*DENMARK: Co-operation between kindergarten and primary school

Description d'une expérience ayant pour but d'habituer les enfants à l'école. Collaboration entre le jardin d'enfants et l'école. La maturité des élèves. Le contact avec les parents. Données des observations. L'attitude des enseignants.

MAGNE O. and others: Project FÖL - Förskola-lågstadium i samverkan (Pre-school education integrated with primary school education) Educational Research European Survey 1970, Volume I, p 113

*SWEDEN: Research into the integration of pre-school and primary school education

Started in 1970 this project is a research and development project in co-operation with the Group for Educational Development of the Malmö City School system. It has three main aims: to investigate methods and materials in order to improve the pre-school curriculum; - to investigate connections between the pre-school and the primary school, in order to explore the potential value of a non-graded school comprising children between the ages of 6 and 10; - to investigate the frequency of socially handicapped children and to try to find methods to integrate them with other children between the ages of 6 and 10.

Methods: Revision and construction of methods and materials; - construction of a model for a non-graded school form with emphasis on integration of socially handicapped children and their adaptation to other children; - construction and revision of instruments to evaluate the effects.

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2.0 CHILD DEVELOPMENT

MIGNON P., MERGNY R.: Le jeune enfant dans un nouveau milieu: l'école, L'école maternelle française, no. 1, sept. 1970, pp 11-12

*FRANCE: Adaptation to the nursery school

L'adaptation du jeune enfant à la maternelle. La socialisation à travers les activités. Dossier constitué d'après l'observation continue d'enfants citadins ou ruraux, d'origines sociales diverses, observation permettant de déceler les facteurs qui déterminent ou accentuent le malaise éprouvé par la plupart d'entre eux.

RUMI M., GUALCO S.: Il bambino e la scuola materna - Torino, S.E.I., 1970

*ITALY: Child development in relation to beginning school

Le livre dresse, d'une part, un plan complet du développement de l'enfant en bas âge pour ensuite considérer le passage et l'insertion dans l'école maternelle dont les problèmes sont traités en fonction de la famille, des caractéristiques du milieu et de la personnalité de l'éducatrice pour enfin aboutir à l'examen critique et analytique des orientations.

D'autre part, il reprend cette problématique dans le contexte de la croissance qui est analysée en fonction des facteurs pouvant la troubler et dont l'étude doit être incorporée dans la préparation de l'enseignant.

HAGESAETHER G.: Førskoleklasser. Metodeforsøk (Pre-school classes - teaching methods experiment) School Board of Oslo, Department for School Experimentation and Research, Educational Research European Survey 1970, Volume II, p 123

*NORWAY: Research project into methods to prepare children for school

Starting date: 1969

Purpose: To elaborate a teaching methods plan for the school-preparatory activities of the pre-school system, and to measure its effect.

Procedure: The municipality of Oslo has a total of fourteen experimental pre-school classes in the school year 1970-71. Four of these classes were chosen to participate in the project.

Pre-school class children in Oslo are chosen at random from among those for whom an application has been received. However, before the distribution of available pre-school places was made, all of the applicants from the two school districts in question were subjected to school psychological tests. The groups were then made up in such a way that the groups of pre-school pupils were similar in intellectual maturity, sex and age to those children for whom there was no place in a pre-school class.

The pre-school classes follow the framework plan that has been drawn up in connection with the pre-school experiments in Oslo. A teaching methods plan is being used in the schools involved in the project that is more detailed as far as the school preparatory activities are concerned, than the one usually used in other pre-school classes. The plan still allows the individual pre-school teacher great freedom and there is no curriculum requirement involved.

When the children enter the 1st grade, and at later stages of their school career, a comparison will be made between those pupils who have attended pre-school classes and those who applied but who were not admitted. It is hoped that a more precisely defined measurement of the effect of attending a pre-school class will be obtained in this way than has previously been possible.

The project is part of a co-operative project drawn up by OECD/CERI in which research teams from Sweden, the Netherlands and Great Britain are also participating.

SIGSGAARD T.: Social adaptation related to schooling-in problems
The Royal College of Education (Copenhagen),
Educational Research European Survey 1968, Volume I, p 17

*DENMARK: Adaptation to school life

Starting date: November 1968

Purpose: The purpose of the project is to investigate factors in social adaptation, which are considered to be of importance for children's school-start, for instance dependence, independence, autonomy, security, aggression, and anxiety.

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Procedure/Methods: The procedure will be interviews with teachers, visits to the classroom and registration of the children's behaviour; some testing.

JENSEN A.R.: Understanding readiness: an occasional paper. ERIC Clearinghouse on Early Childhood Education, Urbana, Ill. Pub. date 1969, 19 pp. ERIC ED 032 117 PS 002 100

*USA: Dangers of forcing a child to learn before he has acquired the necessary developmental maturity

Readiness to learn occurs when a child has achieved cumulative learning of component sub-skills and the developmental maturity necessary to integrate these sub-skills into the desired skill. Readiness is relative, however, not only to the skill, but also to the technique of instruction. Thus, readiness for learning a particular skill by different techniques may come at different times. Attempting to force instruction on a child who is not ready can cause the child either to learn the skill by a more primitive technique (one which has little transfer value to other learning) or to "turn off" to learning altogether. "Turning off" means extinction or inhibition of behaviours necessary to learning, such as attention and active involvement. Many school learning problems, particularly those of disadvantaged children, might be avoided if more attention were paid to readiness in the primary grades, when the danger of "turning off" because of lack of readiness is greatest. Experimental programmes are needed that would actually delay formal instruction (while filling in necessary experiential factors) until readiness is apparent.

WIENER G.: Long-term study of prematures: summary of published findings. Johns Hopkins University, Baltimore, Md. School of Hygiene and Public Health. Pub. date [1968], 56 pp. ERIC ED 043 389 PS 003 651

*USA: Influence of premature birth

Are children intellectually impaired as a result of low birth weight and does relative impairment change as children grow older? Premature infants from a range of socio-economic groups were studied in five rounds over 13 years to provide neurological, psychological, achievement, and sociological data on 582 children in three birth weight groups. A summary based on the final round makes these points: (1) Birth weight is related to reading and arithmetic achievement when social class and race are

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controlled, (2) Birth weight remains a significant correlate when an attempt is made to control for neurological status (estimated at age 40 weeks), (3) The correlation between indices of mental development and late adolescent intellectual behaviour approaches zero, (4) Arithmetic is apparently more sensitive as an indicator of impairment due to birth weight than is reading, (5) None of the statistical interactions between race, social class, birth weight, and achievement were significant.

KIENER F.: Jahreszeit der Geburt, Begabung und Schulleistung (Season of birth, aptitude and school achievement) Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie, 1969, 1, pp 272-284

*FEDERAL REPUBLIC OF GERMANY: Possible influence of season of birth on ability

A survey of last years' pertinent publications shows that there may possibly exist a certain influence of the season of birth on ability and school achievement. Mentally retarded children are born rather in winter and spring; normal children born in England during summer and autumn obviously receive a discriminating treatment from the part of the educational organisation, and, therefore, frequently achieve less. These results have a certain significance also for German conditions.

SPAULDING R.L., KATZENMEYER W.G., Effects of age of entry and duration of participation in a compensatory education programme.
Duke University, Durham, N.C. Pub. date 21 April 1969, 11 pp. ERIC ED 043 380 PS 003 421

*USA: Entry age does not affect gains registered

One of a series of reports evaluating the Durham Education Improvement Programme, this study concentrates on assessing the influence of age-of-entry on subsequent changes in performance on intelligence tests. Changes in intelligence quotient scores for two age-at-entry groups (3-, 4-, 5-year-olds combined and 6-year-olds) were correlated after one and two years of participation in the programme. Although significant increases in measured intelligence were found after both one and two years in the programme, no one entry age afforded greater increases in scores than another.

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TORRANCE E.P., PHILLIPS V.K.: A three-year study of continuity of creative growth under a cognitive-structured approach to educational stimulation. Georgia University, Athens. Research and Development Centre in Educational Stimulation. Pub. date September 1969, 13 pp. ERIC ED 042 287 EC 006 001

*USA: Greater continuous creative growth amongst children entering as 5-year-olds than those entering as 4-year-olds

Tasks from the Torrance Tests of Creative Thinking were administered to children in a cognitive-structured pre-primary programme. Results indicated that children entering as 5-year-olds showed a continuity of creative growth and excelled their controls on elaboration at the beginning of grade 1 and end of grade 2. Also, at the end of grade 2, they excelled their controls on verbal originality. Children entering as 4-year-olds also showed continuity of creative growth while in the pre-primary programme but tended to slump in figural originality and elaboration while in grade 1.

LIIKANEN P. and others: Esikouluikäisten taidekasvatusta ja luovien kykyjen virittymistä koskeva tutkimusprojekti (Art education and creativity of pre-school children), Educational Research European Survey 1970, Finland, Volume II, p 47

*FINLAND: Research project into art education and creativity of pre-school children

Starting date: September 1970

Purpose: Definition of the aims of art education, empirical research on problems connected with these aims. A survey on the child's cognitive, emotional and social environment, his development (susceptibility), and the interaction of these.

WHITE B.L.: Competence in young children. Harvard University, Cambridge, Mass. Centre for Research and Development in Educational Differences. Pub. date March 1969, 55 pp. ERIC ED 032 124 PS 002 117

*USA: Importance of the second and third years of life in developing human competence

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Four papers discuss the Harvard Pre-school Project whose goal is to learn how to structure the experiences of the first six years of life to encourage maximal development of human competence. To determine what competence at age 6 is, a group of 13 highly competent 6-year-olds of mixed residence, class, and ethnicity were compared to a like group of 13 low competence 6-year-olds and the resultant information was collected in protocols. From this material, a list of differentiating abilities, some social and some non-social, was compiled. Highly competent 3-year-olds were found to be more advanced in these abilities than 6-year-olds who were doing poorly. As there was little competence divergence at age one, it was clear that an investigation of the interaction of experience and the development of competence should be focused on the second and third years of life (mostly familial experiences). To measure comparative experiential histories, an instrument was developed for codification of moment-to-moment behaviour on the basis of inferred purpose. The next step will be the collection and analysis of data from families that have succeeded or failed to develop children of high competence. Also planned are longitudinal studies in which children will follow task sequences designed for optimal development.

RUBIN R.: Effects of kindergarten attendance on development of school readiness and language skills. Interim report.
Minnesota University, Minneapolis. Department of Special Education. Pub. date 30 January 1969, 21 pp.
ERIC ED 029 706 PS 001 953

*USA: Earlier development of school readiness and language skills amongst girls

This study was made to find out to what extent kindergartens contribute to school readiness. Ninety children with a mean chronological age of 4.9 were tested with the Metropolitan Readiness Test (MRT), the Illinois Test of Psycholinguistic Abilities (ITPA), and a Behaviour Rating Scale and were re-tested one year later. During the intervening year, 36 of the children attended kindergarten, while 54 did not. The data were analysed by sex. On the pre-test scores, there were no differences between kindergarten (K) and non-kindergarten (N-K) boys. K girls, however, did score significantly higher than N-K girls on total MRT and ITPA scores and on parts of the Behaviour Rating Scale. Girls scored consistently higher than boys in overall pre-testing. The results of the study support the prevailing view that as children reach kindergarten age,

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school readiness and language skills of girls are further developed than are those of boys and that growth in these areas cannot be attributed to any special influence of the normal type of kindergarten programme in this study.

SMITH P.: Intellectual differences in five-year-old underprivileged girls and boys with and without pre-kindergarten school experience, Journal of Educational Research, 1968 61(8)

*USA: Girls benefit most from pre-school programmes

Poverty-area children (N=55) at the completion of a full-year pre-kindergarten programme were compared with 47 same-aged children from a similar socio-economic area who had no pre-kindergarten experience. The children with pre-schooling scored significantly higher on the Stanford-Binet and on the Peabody Picture Vocabulary Test. Virtually all of this difference, however, was accounted for by the girls with pre-kindergarten schooling who scored significantly higher than boys with the same schooling. These boys scored only slightly higher than those with no schooling and at about the same level as girls with no school experience.

LYNN D.B., CROSS A.R.: Parent preference of pre-school children. Pub. date [1970], 5 pp. ERIC ED 041 628 PS 003 278

*USA: Parent preference amongst pre-school children

An experiment was conducted to test the theory that young boys prefer the companionship of their fathers in play activities to that of their mothers, while young girls have no particular preference. It was hypothesised that a boy has this preference because he has been cared for primarily by his mother, and his discovery of sex-identity leaves him particularly insecure in his shifting sex-role, thus producing a strong affinity for the most available masculinity model, his father. Girls develop no such preference because they have been primarily cared for by the same-sex parent, a less confusing and less traumatic situation. This theory was tested by placing children in seven play situations and asking them which parent they would like to have join them in each of the activities. The subjects were 150 2-, 3-, and 4-year-olds (76 boys and 74 girls). The criterion for parent preference was 4 or more choices of one parent. Analysis of the data revealed that the boys significantly preferred the father to the mother. Girls showed no consistent parent preference for the total sample, but this was the result of significant preferences: for the father at age 2 and for the mother at age 4.

HAUPT D.: Developing cognitive learnings with young children. Pub. date 14 November 1969, 19 pp. ERIC ED 041 614 PS 002 851

*USA: Learning attitudes amongst children

This preliminary study explores (1) the relationship between children's behavioural responses to cognitive tasks in a testing situation and in a nursery school environment, and (2) the relationship of the above responses to sex, race, and class differences. Studies by Sigel investigating the classification behaviour of pre-school children, and by Hertzig, investigating the responses of middle and lower-class children to verbal and performance tests, influenced the focus of the present study. Subjects were 30 4-year-old male and female children of different racial and socio-economic backgrounds. Observations were made of the individual child and pre- and post-testing situations, which used the Sigel object and picture categorisation tests and a motor encoding task. Teacher reports assessed children's responses in nursery school. A tentative conclusion is that boys attend less to the specifics of a task demand than do girls. Low income black children and low income white males showed a greater number of breakaway and non-work responses during the picture categorisation task than did the other children. Low income children changed their responses to task demands during the period from pre- to Post-testing by showing increased attention and verbalisation.

NICKEL H.: Die Bedeutung planmässiger Übung für die Entwicklung einer differenzierenden visuellen Auffassung im Vorschulalter (The significance of systematic training on the development of differential visual comprehension in pre-school children), Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie, 1969, 1, pp 103-118

*FEDERAL REPUBLIC OF GERMANY: Successful training in visual perception is more dependent on age and socio-economic status than on intelligence

It was to be examined if the visual achievements of differentiation of pre-school children can be significantly improved by a systematic 6 weeks lasting training in apprehension and discrimination of details. Ss (N = 175) between 4.0 and 5.5 years of age participated in the study. After the end of the training phase a significant increase in efficiency compared to the pre-test could be found in

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the training group, whereas no significant improvements could be registered in the control group. The higher level of achievements attained after the training could be maintained on an average during a longer period of time (3 months), individual deviations included. The effect of training was to a large extent independent of the intelligence of the Ss; it varied, however, according to age and socio-economic status. During a short interval of time children from lower social classes showed more profit of training which was, however, less constant than with children from higher socio-economic groups. Part of the improvements of achievement could also be explained by the particular socio-emotional conditions of the individual occupation during the phase of training, but this effect could only be shown with girls. The results are discussed in connection with different assumptions about the dependence of maturing of a differentiating visual perception, in regard to questions about the qualification for school, and in regard to an adequate pre-school education.

BARTENWERFER H.: Untersuchung zur Entwicklung und zur Ausagekraft der Hirnstrombilder (EEG) von Kleinkindern (Investigations into the development and predictive ability of electro-encephalogrammes (EEG) in the case of small children): German Institute for International Educational Research, Frankfurt/Main, Educational Research European Survey 1970

*FEDERAL REPUBLIC OF GERMANY: Research project into the relationship between electro-encephalogrammes and children's abilities

Does the EEG show "brain maturing"? Are there inter-connections between bodily and mental development characteristics?

3.0 HOME ENVIRONMENT

Mother's training programme, Urbana, Illinois: Model programmes. Childhood education. American Institutes for Research, Palo Alto, Calif. Pub. date 1970, 24 pp. ERIC ED 045 781 UD 011 121

*USA: Mother involvement leads to increasing improvement by children on intelligence tests

Prepared for the White House Conference on Children (December 1970), this booklet reports on a mothers' training programme in Urbana, Illinois. The training programme is a tutorial programme at the University of Illinois involving both mother and child; the programme tries to demonstrate that mothers in deprived areas can be effectively trained to provide own children with a more stimulating home environment and some basic pre-school skills. Results have been highly promising; in contrast to the usual pattern for children from disadvantaged areas, the participating infants show increasing improvement on intelligence tests. The mothers are self-confident and enthusiastic about the programme. The mothers in the programme set aside a regular time for daily training sessions at home with the child; these sessions vary in length depending on the infant's attention span. In addition, the mothers attend two-hour group meetings once a week. The programme provides transportation to the school and pays $6 per session to cover babysitting expenses. Basic toys and other materials are supplied.

BOGER R.P. and others: Parents as primary change agents in an experimental Head Start programme of language intervention. Experimental programme report. Merrill-Palmer Inst.,Detroit, Mich.; Michigan State University, East Lansing. Head Start Evaluation and Research Centre. Pub. date November 1969, 191 pp. ERIC ED 044 168 PS 003 285

*USA: Participation of mothers is of help both to them and their children

The purpose of this study was to determine the effectiveness of parents as change agents in an ongoing Head Start programme. Subjects were 72 rural white disadvantaged and advantaged children and their parents who were assigned to three treatment groups: developmental language, structured language, and placebo (workshop). Mothers met in 12 weekly 2-hour instructional sessions with teachers, using specific materials developed in teacher-directed workshops. (These materials were not used in the Head Start programme during the experimental period.) Pre- and post-tests on a variety of measuring instruments evaluated children's intellectual, linguistic and self-concept performance. Also evaluated was the quality of mother-child interaction and the mother's storytelling ability. Results of the study support the major hypotheses which predicted improvement in language performance, intellectual performance, self-concept development, and mother child interaction, as a result of a differentiated parent

education language programme. No programme approach was clearly superior but mothers in the specific content oriented intervention programme increased their own verbal and linguistic skills as well as the quality of interaction with their children. Children whose parents work with them appear to have a learning advantage.

LITMAN F.: Environment influences on the development of abilities.
Harvard University, Cambridge, Mass. Graduate School of Education. Pub. date March 1969, 11 pp.
ERIC ED 032 126 PS 002 121

*USA: Importance of the quality rather than the quantity of mother-child interaction

Observational research was conducted in homes with a wide socio-economic range to identify the major factors of experience that affect the development of a child's abilities. Thirty children, aged 12 to 36 months, were observed in three aspects of their environment: Human (family and peers), Static Physical (home and neighbourhood), and Range of Experience (situations and activities in child's regular life pattern). On standardised scales or scales devised for this study, children were rated as very well developed or very poorly developed with respect to social and non-social competency. Rating scales which assessed patterns and effects of maternal behaviour showed that well-developed children can come from crowded or spacious homes and that limited use of resources can be found in both lower-class and middle-class homes. The quality rather than quantity of mother-child interaction was significant. After rating mothers on interaction, motivational factors implicit in the mother's behaviour, and material resources available to and used by the child, five patterns of maternal behaviour were described. These five prototypes were (1) the competent mother, (2) the "almost" mother, (3) the mother who is overwhelmed by life's circumstances, (4) the rigid, controlling mother, and (5) the smothering mother.

BADGER E.D.: Mothers' training programme: The group process. Pub. date 1 July 1969, 25 pp.
ERIC ED 032 926 PS 002 142

*USA: Mothers are only fully effective as teachers in the second year of the programme

This study hypothesised that mothers from a low socio-economic area could be trained by teachers to implement an infant tutorial programme using their 1- to 2-year-old children as subjects. The 20 mothers recruited

came from a disadvantaged setting. Mothers agreed to attend a 2 hour weekly class to learn teaching techniques to be applied at home. Meetings were divided between child-centred activities (presentation of educational toys and materials) and mother-centred activities (discussions on child management and birth control). The second year programme suggested mothers use positive reinforcement, show increased interest in learning, and give children experience in problem-solving. Study results showed that the infants made intellectual gains on the Stanford-Binet and Illinois Test of Psycholinguistic Abilities. Mothers showed much interest in the 2-year programme, attended regularly, and became involved in paraprofessional teaching and Head Start. Teacher observations during home visits indicated that mothers' attitudes changed positively in respect to teaching their infants. The study concluded that parents must be included in programmes for the disadvantaged and that the time variable is crucial to attitude change since it was the second year before mothers developed the self-confidence to use at home what they had learned in class.

KARNES M.B.: A new role for teachers: Involving the entire family in the education of pre-school disadvantaged children.
Illinois University, Urbana. Inst. of Research for Exceptional Children. Pub. date [1969], 21 pp.
ERIC ED 036 339 PS 002 885

*USA: Participation of mother and other siblings

This approach to pre-school education of the disadvantaged uses a teacher training programme which was developed only after each component of the programme had been empirically tested. Teachers were re-trained through course work and workshops to teach disadvantaged pre-school children. These teachers then taught mothers and older siblings of disadvantaged families the skills and knowledge necessary to instruct the pre-school child both in the home and in the school setting. Pre- and post-test scores on standardised tests indicated that pre-school children who participated in the projects made gains comparable to those made by children taught by a professional staff. Research findings were incorporated into on-going demonstration classes at the University of Illinois. The classes provided (1) practicum experiences for students in a leadership training programme, (2) observation facilities for teacher-training students in elementary and special education, (3) the basis for

workshops involving teachers and administrators from local communities, and (4) guidelines for junior college personnel interested in developing training programmes for para-professionals.

GARFUNKEL F.: Pre-school education and poverty: The distance in between. Final report of 1968-69 interventional programme.
Boston University, Mass. Headstart Evaluation and Research Centre. Pub. date July 1970, 49 pp.
ERIC ED 046 501 PS 004 017

*USA: Full parental involvement sought; the supreme importance of I.Q. rating questioned

An educational intervention programme for lower income children was characterised by parent involvement in all stages. Active dialogue between parents, teachers and the Boston University Head Start Evaluation and Research Centre (BUER) was considered a primary purpose and encouraged by BUER training, research and service activities. An ethical code evolved which committed university researchers to a non-traditional research programme, open to community involvement and criticism. The need for institutional change was perceived as more critical than any particular curricular content, and the programme was closely involved with community problems. Programme components discussed are: parent involvement in decision making; in-service training; observation and feedback; diagnostic and follow-up work; and development of a new research tool, the Classroom Behaviour Form. The complex nature of evaluation is discussed, and the use of I.Q. gains to measure the success of intervention programmes is questioned. Political, social, and economic goals of Head Start programmes are cited as more important to the needs of the people served than the education per se of young children. Head Start evaluation studies should, therefore, include evaluation of these goals.

GREY A.: Aboriginal family education centres, The New Era, Volume 52, Nos. 1 and 2, 1971

*AUSTRALIA: The family used as a teaching unit

A description of a project in New South Wales, originating as educational centres for very young aboriginal children but becoming "Family Education Centres" as parents wished to be responsibly involved in their children's education. The financing and administrative organisation is explained.

HERVEY S.D.: Attitudes, expectations, and behaviour of parents of Head Start and non-Head Start children. Report number 1.
Merrill Palmer Inst., Detroit, Mich.: Michigan State Univ., East Lansing. Head Start Evaluation and Research Centre. Pub. date August 1968, 24 pp. ERIC ED 030 475 PS 001 909

*USA: Head Start has little effect upon parents

Head Start was conceived not only as an intervention programme with children, but as a total effort of intervention in the disadvantaged family. Head Start seeks to influence the child not only directly through the classroom programme, but indirectly through the parents. It is, therefore, important to determine if parent participation in Head Start modifies their attitudes and behaviour in a way relevant to the positive development of their children. In order to ascertain if such a change takes place, Head Start parents were compared with non-Head Start parents as to educational and child rearing practices. The data was obtained by administering the Merrill-Palmer Head Start questionnaire to 103 Head Start parents and 77 non-Head Start parents. Both samples were Negro and comparable on income level and family size. Very few behaviour and attitudinal differences between the two groups of parents were found. Those few differences were meaningful only individually and did not follow any pattern. These findings fail to support the assumption that Head Start experience will change the parents and thereby influence the child.

BALL R.S.: The relation of certain home environment factors to the thinking abilities of three-year-old children. Final report.
Arizona State University, Tempe. Pub. date April 1970, 51 pp. ERIC ED 039 041 PS 003 400

*USA: Relation of home environment factors to different kinds of mental operation in children

This study investigated (1) three kinds of mental, operation in children: divergent production, convergent production, and cognitive thinking manifested in 3- to 4-year-olds and compared the results to results of a study of 4- to 5-year-olds, and (2) the relationship between children's abilities and their parents' level of education, children's sex and age, parents' occupations, the amount of time the father spends in the home and the mother spends reading and playing with her 3-year-old, and the type of nursery school attended. Mother interviews and test protocols were obtained for 416 children between the ages 3-0 and 3-11. Results

indicated the most striking relationships between level of education, environmental experience, and aspects of thinking ability. Children with mothers at home full-time were less able in visual and spatial manipulation. Children with professional fathers showed less ability but scored higher in ideational fluency. Children of fathers who attended college were more able in convergent figural thinking. Mothers' education was related to verbal tasks as well as figural. Some geographic differences were found. It was evident that 3- and 4-year-olds showed "types" of thinking ability.

ORTAR G., CARMON H.: An analysis of mothers' speech as a factor in the development of children's intelligence. Hebrew University of Jerusalem (Israel). Pub. date August 1969, 116 pp. ERIC ED 042 504 PS 003 412

*ISRAEL: Significant correlation between children's intelligence level and the verbal ability of their mothers

The present study aimed: (1) to systematically describe and classify the speech input received by children of specified ages from their mothers in the home, (2) to investigate the interdependence between the quality of the mother's speech, her socio-cultural background, and her children's level of intelligence, and (3) to determine whether some attributes of the mother's speech can be modified if she wishes. The speech of 57 mothers from two ethno-cultural groups was recorded during two 60-minute sessions in each home. Siblings of two ages were observed: a child not yet talking (about 1 year old), and a child already talking (about 3 years old). A third visit yielded background information from the mother, and during a fourth visit (1 year later), the older child and the mother were given intelligence tests. The units of speech analyses were words and sentences, dealing with speech aspects of amount, content, and form. Although all variable factors affecting verbal behaviour were not controlled, study results yielded (1) meaningful measurement of four aspects of speech, and establishment of preliminary norms to evaluate a mother's manner of speech, (2) significant correlations of the children's intelligence level with the measures of mothers' speech, and (3) preliminary indications that readiness and ability of the mother to modify her speech is correlated with her intellectual level (part of an ongoing experiment).

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KUHZ J., MAYER J.E.: A comparison of economically disadvantaged and economically advantaged kindergarten children, The Journal of Educational Research, Volume 62, Number 9, May-June 1969

*USA: Economically disadvantaged children are not poor performers in all ability areas

Two studies were conducted concurrently to determine whether there are significant differences in selected characteristics between economically disadvantaged (25) and economically advantaged (18) five-year-olds.

The hypotheses of no relationship between economic disadvantage and economic advantage and physical skills, attempts at problem solving, and preference for rewards, were supported.

The hypothesis of no difference in length of sentences spoken by economically disadvantaged and economically advantaged children was supported.

The hypothesis of no difference in naming and defining ability of economically disadvantaged and economically advantaged children was partially supported.

The hypothesis of no difference in vocabulary scores and motor skills of economically disadvantaged and economically advantaged children was not supported.

A significant difference was found in the eye-hand motor skills between the economically disadvantaged and the economically advantaged groups of children. This finding is indicative of the lack of experience with manipulative materials which the disadvantaged children exhibited, and further emphasises their deficiency in visual discrimination ability.

PALMER F.H.: Early intellective training and school performance. Summary of NIH grant number HD-02253.
City University of New York, N.Y. Inst. for Child Development and Experimental Education. Pub. date August 1968, 5 pp. ERIC ED 025 324 PS 001 485

*USA: Up to age three social class is not a function of performance

A 7-year study is being conducted to determine if an 8-month intellective training programme at ages two and three will improve a child's performance and if the effects will last through the first grade. The subjects

consist of 240 Negro males from all social levels in Manhattan. Half of them are 2 years old and half are 3 years old. Subjects were assigned to an individual instructor in either a training group (where they were taught concepts) or a discovery group (where they had free play) for 2 hours a week. In addition, a control group of 70 children are being seen for assessment purposes only. All children were pre-tested and are measured annually. After 2 years of the programme, the results indicated that up to age three, social class is not a function of performance; from ages three to eight differences are present but insignificant; the experimental children perform better than the control children; the effects of the programme received at age two last at least 1 year; and both experimental groups produce equally well. The results imply that early training may be beneficial, provided it is systematic, is uninterrupted, and occurs at least 2 hours a week with a one-to-one teacher-pupil ratio.

BENY M.F.: La liaison entre facteurs du milieu familial et niveau intellectuel des enfants en début de scolarité: Laboratoire de Psychologie Différentielle, Institut National d'Orientation Professionnelle, Paris, Educational Research European Survey 1970

*FRANCE: Research project into the relationship between the family environment and a child's level of intelligence

Méthode: Application d'un questionnaire aux parents d'enfants actuellement élèves de cours préparatoire concernant les pratiques éducatives et quelques autres aspects du milieu familial, transmis à 10,000 familles par les Conseils locaux de Parents d'Elèves. Application aux enfants, en fin d'année scolaire, du Cahier 1 de l'échelle collective de niveau intellectuel, en même temps qu'un questionnaire sera soumis aux instituteurs.

4.0 METHODOLOGY

COOPER M.L.: A shoe is to tie: A film demonstration of programming self-help skills for pre-school children. Progress report.
Kansas University, Lawrence. Head Start Evaluation and Research Centre. Pub. date August 1969, 6 pp.
ERIC ED 042 500 PS 003 331

*USA: Successful use of programming techniques

At the Edna A. Hill Pre-school Laboratories at the University of Kansas, children between the ages of two and five are being taught two kinds of precise skills, some to prepare them for the academic world and others to enable them to care for themselves more independently. Behaviour analysis and application of reinforcement principles make earlier skill development possible. In this programme, skills are programmed by simplifying the steps, isolating the specific responses, and consistently reinforcing correct responses. The amount of time and effort exerted by both child and adult is greatly decreased. An example of a self-help skill taught in this programme is shoe-tying. As the child learns the skill, he is reinforced, the extra-long laces are shortened, and the instructions are phased out until he can tie his own shoes with no instructions. Through such programming, skills have been successfully and easily taught to children in the programme at earlier ages than would traditionally be expected.

KATZ L.G.: Condition with caution: Think thrice before conditioning (Rough draft).
ERIC Clearinghouse on Early Childhood Education, Urbana, Ill., Pub. date February 1971, 7 pp.
ERIC ED 046 539 PS 004 407

*USA: Danger of indiscriminate use of operant conditioning

Innovative models for education are often quickly adopted. Behaviour modification, or operant conditioning, is an example of a technique which has been widely used because, when properly applied in the classroom, it "works". However, the application of a technique should be carefully thought through in terms of the meaning of the behaviour in question. For example, three children may exhibit the same disruptive behaviour, or phenotype. Yet the geneses or genotypes of the behaviour may be very different. The child may have learned this behaviour through reinforcement at home or at school; the behaviour may be an expression of an emotional injury; it may indicate a lack of social skill or knowledge of alternative ways of response; or there may be other causes. For all genotypes, behaviour modification may be successful in changing undesirable behaviour, but it does not always address itself to the underlying cause of behaviour. A paradigm is given showing possible phenotype/genotype/treatment relationships.

PALMER E.L.: "Sesame Street": shaping broadcast television to the needs of the pre-schoolers, Educational Technology, February 1971, Vol. XI, No. 2, pp. 18-22

*USA: Assessment of "Sesame Street"

Mr. Palmer, Vice-President and Director of Research of the Children's Television Workshop, producer of "Sesame Street", discusses the aims of this TV programme and the techniques used in trying to achieve them. It is claimed that children who watch the programme showed greater learning gains than children who did not, regardless of socio-economic status; that children who watched the show most gained most; that disadvantaged children who watched "Sesame Street" frequently made gains surpassing those of middle-class children who watched infrequently; and that three-year-old children had greater gain than the older children.

JORDAN T.E.: Discriminating characteristics of families watching "Sesame Street". Early developmental adversity programme: Phase III, EDAP Technical Note 15.1.
Spons Agency - Central Midwestern Regional Educational Lab., St. Ann, Mo.; Office of Education (DHEW), Washington, D.C. Pub. date March 1970, 5 pp.
ERIC ED 039 943 PS 003 082

*USA: A smaller percentage of lower-class children watch "Sesame Street" than of middle-class children

"Sesame Street" is a television programme aimed at stimulating young viewers. This study, a part of the Early Developmental Adversity Programme, attempts to discover what demographic characteristics are associated with children who view or do not view "Sesame Street". The subjects of the study were 69 3-year-old children. Black and white, as well as middle-class and lower-class children, were represented in the sample. The data generated by this study indicate that "Sesame Street" is watched by a disproportionately small number of black children. For every black child watching there are four or five who do not, while among whites there is an even split between watchers and non-watchers. A predictably similar pattern of results is found when watchers and non-watchers are compared on the basis of socio-economic status. A significantly smaller percentage of lower class children than middle-class children watch the programme. Thus, viewers already belong to the group most prepared for school, while non-viewers are those who most need the possibly beneficial effects of "Sesame Street".

Appalachia pre-school education programme, Charleston, West Virginia: A three-part pre-school programme combining a television programme, para-professional home visitors, and a mobile classroom. Model programmes.

Childhood education: American Institutes for Research, Palo Alto, Calif. Pub. date 1970, 17 pp. ERIC ED 045 216 PS 004 200

*USA: Television by itself is not enough

A breakthrough programme to reach rurally isolated children to prepare them for first grade, the Appalachia Pre-school Education Programme was begun in September, 1968. Four hundred and fifty 3- to 5-year-olds are participating in three treatment groups: (1) children who, in or near their own homes, are shown a daily educational television programme, have a weekly session with a home visitor, and a weekly visit to a mobile classroom, (2) children who receive the television programme and the home visitor, but do not attend the mobile classroom, and (3) children who receive the television programme only. A control group receives no pre-school education. Significant gains on cognitive and language skills were shown by children in Groups 1 and 2. With certain modifications, such as increased use of the mobile classroom, the programme will continue until the spring of 1971. Evaluation will continue until 1972. Sources of more detailed information are provided for this programme, specifically, and for Model Programmes Childhood Education, in general.

BUSSE T.V. and others: Environmentally enriched classrooms and the development of disadvantaged pre-school children.
Spons Agency - Office of Economic Opportunity, Washington, D.C. Pub. date [1970], 67 pp. ERIC ED 045 192 PS 003 666

*USA: Lavish equipment is not a panacea for the problems of disadvantaged children

This study evaluates the effects of placement of additional equipment in pre-school classrooms on the cognitive, perceptual, and social development of urban Negro four-year-old children. Two Get Set classrooms in each of six areas of Philadelphia were paired for teachers, subjects, physical facilities and equipment. One classroom in each pair was enriched through the addition of materials designed to augment one or more of the following: verbal ability, performance ability, visual perception, auditory perception, and social interaction. Enrichment items included a tape recorder and tapes, a Polaroid camera with film and flash-bulbs, puzzle sets, prisms, and Negro dolls and puppets. Pre-test and post-test measures assessed cognitive, perceptual and social development of the children. The findings show that the enrichment significantly altered the classroom environment in the experimental classes. Signs of the alteration were present in the cognitive, perceptual and social development of the experimental children. However, the control children showed greater

gain scores in performance ability. Since both desirable and undesirable effects can result from environmental enrichment, the more extravagant claims for the efficacy of certain play materials should be muted and a properly equipped classroom should not be regarded as a panacea for the problems of disadvantaged children.

HARDE O., SIERSLEBEN W. and WOGATZKI R.: Lernen im Vorschulalter (Learning in the pre-school age), Schroedel Verlag, Dortmund, 1969,86 pp.

*FEDERAL REPUBLIC OF GERMANY: Teaching in small groups; co-operative approach to problem-solving

The authors report on pre-school programmes which have been carried out in Hannover since 1968 with socially disadvantaged children. The aim of these programmes is to enable such children to start school with equal opportunities. In contrast to the American Head Start programmes, the promotion of linguistic and cognitive abilities was not given priority. The Hannover programmes are concentrated on the integration into small groups and on co-operative techniques of problem-solving by such groups. Finally, the authors put forward a number of recommendations for the training of pre-school teachers for such programmes.

SMITH D.R.: The effect of four communication patterns and sex on length of verbalisation in speech of four-year-old children. Final report.
State University of New York Research Foundation, Buffalo. Pub. date March 1970, 25 pp. ERIC ED 042 514 PS 003 455

*USA: Small group situation preferable to dyadic situation for speech development

The assumption that the dyadic communication pattern (one teacher-one student) is the most effective pattern for encouraging language and speech development among elementary and pre-school children is tested in this study. Fifty-six 4-year-old children from the Task Force Head Start Programme of Buffalo, New York, were observed in four different communication patterns and the mean length of their verbalisations was recorded. Also noted was the interaction of sex with each of the conditions. The patterns used were the dyad, the triad (1 experimenter and 2 children), the small group (1 experimenter and 3 children), and the role-playing triad (same as triad, but with children encouraged to act out roles). Analysis of the data revealed no significant inter-pattern differences in

mean verbalisation length, except that the small group elicited a statistically greater amount of speech than did the dyad (both with repetitions left in and with repetitions deleted). With and without repetitions, girls produced significantly more speech than boys. While the actual difference between the speech from the small group and from the dyad is small (less than one word per response), findings are important because they demonstrate that the dyadic situation may not be justified in terms of speech development, particularly since it is less economical of the teacher's time.

BOGER R.P. and others: Heterogeneous vs. homogeneous social class grouping of pre-school children in Head Start classrooms.
Merrill-Palmer Inst., Detroit, Mich.; Michigan State University, East Lansing. Head Start Evaluation and Research Centre. Pub. date 14 February 1969, 92 pp. ERIC ED 045 176
PS 003 269

*USA: Positive value of having advantaged and disadvantaged children in the same group

This study tests the hypothesis that disadvantaged children learn more from interaction with advantaged children in Head Start classrooms than when grouped solely with other disadvantaged children. Subjects were 32 disadvantaged children who were assigned to two experimental groups of eight each and a control group of 16. Eight advantaged children were added to each of the experimental groups. Teachers assigned to all three classes were similar in experience, teaching style and demographic characteristics. Variables of chief interest in this study were cognition, language, and socilisation. Pre- and post-tests on a variety of standardised and specially developed instruments evaluated the performance of all children. Videotapes were used to assess socio-emotional behaviours such as aggression and dependency. When comparisons were made between control and experimental groups results indicated support for increased educability in classes holding a higher percentage of advantaged peers. Consistent gains were evident although significance at the.05 level was not reached. The experimental children gained in task persistence and verbal skills; aggressive and dependent behaviours decreased; and self concepts improved.

Model cities: Guaranteed reading achievement.
Chicago Board of Education, Ill. Pub. date November 1970, 118 pp. ERIC ED 045 332
RE 003 226

*USA: Performance-contract reading programme ./.

As part of the Chicago Model Cities Reading Project, the Chicago Board of Education plans to conduct a performance-contract reading programme. The primary objective is to raise the composite reading vocabulary and comprehensive skills of each pupil in the programme, as measured by a standardised reading test, by more than one grade level equivalent during each school year of performance-contract instruction. Fulfilling this objective will be the only basis for reimbursement to the instructional contractor. Approximately 700 kindergarten and primary-grade children and 1,100 intermediate-grade pupils located in ten inner city elementary schools will serve as subjects. The proposed instruction will consist of 1 hour per day in special laboratories, and will begin in March 1971 and continue during the school year through February 1972. Included in this document are the following: the project description, the request for proposals, a description of the population selection and characteristics, and the proposal format and evaluation criteria. Tables and charts are included.

5.0 SKILLS

5.1 LANGUAGE

TOUGH J.: Language and environment: An interim report on a longitudinal study.
Leeds University (England). Inst. of Education.
Pub. date [1969], 28 pp. ERIC ED 032 136 PS 002 159

*UK: The effect of environment on the development of a child's language

Although the relationship between language and intellectual development in children is often ambiguous, language retardation appears to be one of the main ways that a disadvantaged environment hinders achievement. While American research has indicated that nursery education may effectively extend language experience, few studies have been done in England to investigate how much early social experience can influence a child's intellectual functioning by way of his development and use of language. The present longitudinal study established four groups of 3-year-olds matched for intelligence and sex by crossing the two variables of home background and nursery school experience. Children's speech was recorded in a natural setting session. Complex operations were then run on the data and the different groups were compared on such aspects of their language as representation, information loss, anaphoric and exophoric use of pronouns,

mean length of utterances, complexity, noun-verb phrase indices, and function. These comparisons demonstrated the superior development of the environmentally favoured group over the unfavoured group, and while a few cases showed the nursery group's superiority to the non-nursery group, the results were less clear.

ALLEN J.C.: Visual perception and oral language production.
University of Georgia. Pub. date 1968, 119 pp.
ERIC ED 039 221 TE 001 690

*USA: Relationship between visual perception and oral language

Forty-eight boys and girls, from ages 4 to 8 and with wide differences in intelligence, were subjects in a study which examined the role of visual perception in the oral language production of young children. Five tests were administered: one to sample visual perception, the others to measure selected skills of oral language-syntactical, morphological, and associative. Results indicated that visual perception processes contributed significantly to explaining the variance of some skills in all aspects of language sampled. In addition, differentiation among the visual perception processes occurred: spacial relationships contributed consistently to the morphological and associative skills, with constancy of shape contributing to the syntactical skills. While further research is needed to determine the relationships between visual perception and oral language production in different populations of children, the present results suggest that language development programmes might be strengthened through concomitant training in visual perception.

DELAUNAY A.: L'acquisition précoce des langues vivantes par la méthode naturelle, Revue Française de Pédagogie, No. 14, janv.-fév.-mars 1971, p.5

*FRANCE: Teaching foreign languages at the pre-school stage

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La nécessité de repenser les méthodes d'enseignement en fonction de l'évolution du monde moderne, a abouti à deux moyens différents d'acquérir la pratique d'une langue vivante: la méthode naturelle, c'est-à-dire maternelle et directe, pratiquée au départ de l'école maternelle, et la méthode scolaire ou indirecte, notamment audio-visuelle, qui ne se conçoit guère avant huit ans. Historique de la méthode naturelle. Ses fondements physiologiques et psychologiques. Distinction entre les deux méthodes. La méthode naturelle peut être pratiquée en milieu scolaire. Principes et structures d'une initiation précoce aux langues vivantes. Nécessité d'un dialogue entre les tenants de l'une et l'autre méthode tenant compte de l'opinion des parents.

TAKALA A. and others: Kielellinen kehitys ja kielen oppiminen (Linguistic development and language learning), Centre for Educational Research, University of Jyväskylä, Educational Research European Survey 1968, Vol. III, p 50

*FINLAND: Increased linguistic stimuli increase skills in reading and writing (Preliminary conclusions of research project)

Starting date: 1965

Areas of study:

(a) Vocabulary enrichment and basic communication skills in grade 1 of the basic school. Teaching experiment and research project.

(b) The influence of a vocabulary enrichment programme on the level of concept formation in grade 1 of the basic school.

(c) The influence of a vocabulary enrichment programme on children's drawings in grade 1 of the basic school.

Project aims

Since the children's development and learning qualifications are partly determined by what kind of stimuli they have received in their home environment, the project aims to study whether the learning of reading and writing skills, level of concept formation, and children's drawings can be influenced by a vocabulary enrichment programme.

Research design

The experimental groups in remote villages and in towns were trained in order to increase their vocabulary while the control groups received no training. Both groups were matched on relevant variables.

Conclusions

Preliminary results showed that this kind of vocabulary programme can significantly increase the children's learning qualifications in regard to reading and writing skills.

Recommendations

Since it is possible by means of a vocabulary enrichment programme to increase children's learning qualifications in grade 1 of the basic school, it is recommended that special training in the form of increased linguistic stimuli be given in grade 1 at the latest but

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rather at pre-school age. This would increase the school readiness of children who come from environments which provide little development stimuli.

HERSVALL R-M.: Barnens talspråk vid skolans borjan i relation till senare färdigheter i läsning och skrivning (The spoken language of children starting school in relation to later ability in reading and writing), Institute of Education and Educational Psychology, Lund University, Educational Research European Survey 1968, Vol. I, pp 66-67

*SWEDEN: Research project into the relationship between spoken language and later ability in reading and writing

Starting date: May 1968

Purpose:

(1) to find out whether children showing defects in their spoken language before starting school will have difficulties learning reading and writing to a greater extent than children with a better developed speech, and

(2) to find out whether early speech training will have a favourable effect on the childrens' achievements in reading and writing in the first year of school.

Procedure and methods: The project is partly a study of the relationship between the development of reading and writing abilities and certain basic psychological variables, i.e. auditory perception, tendency of reversing, word-knowledge and attitude to reading and writing. These variables are measured immediately after the school has started in the autumn 1968, and will be related to the results of reading and writing tests in the end of the first year in school.

The project also includes an experiment regarding the effect of an early speech training in school on the ability of reading and writing during the first year of school.

1. Four months before school will begin, a sample of 200 children, beginners of 1968, are tested on school-maturity and spoken language.

2. For the experiment two groups are created, matched with respect to level of spoken language, maturity-level, age, socio-economic group and class. Initial knowledge of reading and writing letters are later checked.

3. One of the matched groups is subject to individual speech correction during the first five months in school. The other group has the function of control-group.

4. When the speech correction is finished both of the matched groups are again given the test for spoken language. The immediate effect of the speech correction on the spoken language can then be studied.

At the end of the first year in school the whole sample of beginners will be tested as regards ability of reading and writing. After that the importance of the different prognostic variables mentioned above, and the effect of the speech correction on reading and writing results, can be studied.

Nature of explicit or implicit recommendations: Extended speech training in class, analysis of word sounds and training of articulation, and for children with special difficulties individual speech correction given by a trained teacher.

5.2 READING

WOODCOCK R.W.: Rebus as a medium in beginning reading instruction.
George Peabody Coll. for Teachers, Nashville, Tenn. Inst. on Mental Retardation and Intellectual Development. Pub. date 1968, 35 pp. ERIC ED 046 631 RE 003 199

*USA: Value of rebuses over traditional orthography in learning to read

While a great deal of attention has been directed to the potential value of using symbol systems other than the traditional 26-letter alphabet in the early stages of reading instruction, little attention has been paid to the potential value of using rebuses. In a linguistic sense, rebuses are symbols which represent entire words or parts of words; whereas, by contrast, letters represent sounds. A rebus may be pictorial, geometric, or even completely abstract. To investigate the hypothesis that pupils learning to read with rebuses would do significantly better than pupils presented the same instructional material in traditional orthography (T.O.), two samples of five pre-school non-readers each were exposed to a learning-to-read situation. The results of the study demonstrated that learning to read rebuses was markedly easier than learning to read T.O.

Furthermore, the differences became even more disparate as the complexity of the vocabulary and sentences increased. The results implied that learning to read derives its problems and difficulties primarily from the abstract nature of T.O. as a symbol system, not from the nature of the reading process itself. It was suggested that rebuses should be more widely used in beginning reading materials to reduce the learning load on the child.

SEGAL M.: Effects of four different perceptual training programmes on I.Q. and reading readiness in the lower socio-economic level kindergarten child. Pub. date February 1971, 74 pp. ERIC ED 046 974 TM 000 334

*USA: Effect of various techniques on reading readiness

The effects of four different kinds of perceptual training programmes on I.Q. and reading readiness in a population of lower socio-economic level kindergarten children were explored to provide useful information for curriculum planning. Data was gathered on 54 disadvantaged 5-year-olds in an OEO day care centre. During the afternoon session, children were randomly assigned to treatment groups for formal learning activities. The same general curriculum was followed in all treatment groups, but each treatment stressed a different kind of perceptual training: Treatment 1 stressed "general readiness", non-alphabet, and visual skills: Treatment 2 stressed alphabet perceptual skills in a primarily visual mode; Treatment 3 stressed alphabet perceptual skills in a primarily auditory mode; and Treatment 4 placed equal stress on auditory and visual alphabet perceptual skills. At the end of the treatment period (35 days), all four groups improved one or more stanine points on reading readiness measures. Group 4 scored significantly better than the other three groups pooled in terms of I.Q. gain, and significantly better than the auditory group on reading readiness in sub-tests measuring visual perceptual abilities.

STEG D. and others: Effects of individual programmed instruction of initial reading skills and language behaviour in early childhood. Pub. date 25 April 1968, 9 pp. ERIC ED 028 026 RE 001 420

*USA: Little difference between the performances of children of different socio-economic groups in learning to read; use of teaching machines

The effects of the Edison Responsive Environment, a computerised typewriter on the development of primary reading skills are discussed. Subjects were 27 3- and 4-year-old children from lower and middle socio-economic

classes. A three-phase programme taught these children to relate the names of letters to their upper- and lower-case graphic symbols, to form words from these letters, and to develop a sight vocabulary for typed letters, words, and stories. Research data from the 12 pre- and post-tested children indicated that after 5 months they could recognise all upper-case letters and some lower-case letters. They could type and recognise their own names. There was no significant difference in language facility development, and there were no significant differences between the performances of children from the different socio-economic classes, even though a 17-point discrepancy in I.Q. was noted. It was concluded that the children did acquire primary reading skills through the use of this machine. Teaching machines are recommended for young children whose attention spans are short.

LEROY-BOUSSION A.: Maturité mentale et apprentissage de la lecture - Etude longitudinale entre 5 et 8 ans. Enfance, No. 3, avril-juin 1971, pp 154-208

*FRANCE: Very limited value of trying to introduce reading at an early age

Nous avons suivi de trimestre en trimestre, pendant trois années consécutives (5, 6, 7 ans) un groupe de 179 enfants afin d'étudier leurs progrès en lecture, compte tenu de leur maturité mentale. Un enseignement systématique et complet de la lecture a été donné dès la grande section d'école maternelle.

Ecole maternelle: Il y a eu échec de l'apprentissage de la lecture à 5 ans. A la fin du troisième trimestre ils devraient, en théorie, déchiffrer une petite histoire et arriver, au moins, au niveau de la sous-syllabique: en réalité, ils lisent tout juste quelques mots isolés. Les sujets (36) de Q.I. inférieur à 90 n'ont retiré aucun profit de leur apprentissage de la lecture au niveau de l'école maternelle. Cependant les enfants (2) de Q.I. 139-130 sont parfaitement mûrs pour la lecture entre 5 et 6 ans. Ils ont assimilé toutes les notions nouvelles au fur et à mesure qu'elles leur étaient enseignées.

Notre expérience montre que les enfants, pris dans leur ensemble, ne sont pas encore mûrs pour apprendre à lire entre 5 et 6 ans. D'après nos résultats, le rythme d'apprentissage utilisé en maternelle au cours de cette expérience (rythme qui était celui de beaucoup d'écoles à l'époque) s'est avéré beaucoup trop rapide: les enfants ont tout à fait perdu pied.

Par contre, personne ne pourra nier que le rôle essentiel de la maternelle, en ce qui concerne le domaine restreint et particulier de la lecture, est de faire en

sorte que les enfants soient aussi mûrs que possible pour aborder cette activité au moment où ils entreront, à 6 ans, au cours préparatoire.

CANE B.S., GOODACRE E.J.: Teaching beginners to read. National Foundation for Educational Research, Educational Research European Survey 1968, Volume I, p 125

*UK: Research project into the methods, materials and problems of teaching children to read

This research project, started in 1959, aims to discover the extent and nature of the task of teaching beginners to read, and to study the relations of the reading attainment and progress of infants to their individual attributes, home circumstances and school conditions. Procedure/methods: (a) A survey of methods, materials and problems in 100 infant schools (b) A longitudinal study, over two years, of some 3,000 children, to provide information on reading readiness and attainment, children's home background and personality traits.

5.3 SCIENTIFIC AND MATHEMATICAL CONCEPTS

McGLATHERY G.E.: An assessment of science achievement of five- and six-year-old students of contrasting socio-economic backgrounds
Texas University, Austin. Pub. date 1968, 95 pp.
ERIC ED 026 271 SE 006 214

*USA: Science successfully taught to 5-year-olds

Assessed was the science achievement of five- and six-year-olds from different socio-economic backgrounds. Classes included both a middle-class and lower-class pre-school class and a middle-class and a lower-class first grade class. Four additional classes, which were studying a local science curriculum, were chosen to match these same grade-level and socio-economic criteria. Instruction was given in the experimental and control classes from September, 1966, through May, 1967. Achievement was assessed by administering competency measures to five randomly selected students from each class after the completion of each of eight exercises. Students in the experimental group scored higher than students in the control group indicating that the impact of a curriculum structure is measurable. Five-year-olds scored as well as six-year-olds indicating that age was not a factor in science achievement with this sample. When evidence of science achievement required verbalisation, middle-class students

This report explores background variables related to pre-school teaching, and emphasises that statistics fluctuate in early childhood education. The increase for pre-primary enrolment of 3- and 4-year-olds was 26 percent from 1966 to 1967. Accurate figures on pre-school teaching personnel are not available, but a large proportion of Head Start teachers had less than 6 months experience with young children before employment. However, one third of Head Start professional staff and almost two-thirds of programme assistants were drawn from minority groups. Certification and credentialing vary widely from state to state. Nursery school teachers are required to hold certificates in only 19 states, although pre-school programmes receiving federal funds must hire teachers with training or ability in child care. Teacher training programmes in colleges reflect inadequate credentialing regulations. The present growth rate suggests double enrolment of pre-school children by 1972. It is concluded that the critical shortage of trained pre-school personnel will continue to grow.

KATZ L.G., WEIR M.K.: Help for teachers in pre-schools: A proposal.
ERIC Clearinghouse on Early Childhood Education, Urbana, Ill.; National Lab. on Early Childhood Education. Pub. date May 1969, 10 pp. ERIC ED 031 308 PS 002 058

*USA: Need for more relevant teacher training

An educational issue today concerns the quality of teaching in pre-schools. Many additional pre-school teachers will be required in the next few years to meet the increased enrolments in pre-school programmes. Not only must proper training programmes for future teachers be designed, but it has been noted that most people now teaching pre-school children have not had proper training for the job. Personnel and training crises are currently relieved by: (1) federally funded institutes and fellowship programmes, (2) the Regional Training Office for Head Start programmes, (3) technical consultants who visit classrooms, and (4) itinerant trainers who are experienced pre-school educators travelling through remote communities demonstrating techniques and skills. However, programmes that provide in-service education unfortunately provide only minimal contact with classrooms. Evidence reveals that new teachers need help in their classrooms from trainers who can answer concrete "how to" questions. Emphasis should be transposed from in-service training to in-service helping. Colleges, universities, professional associations of pre-school teachers, etc., should explore and refine in-service

did better than lower-class children. When non-verbal behaviours were required no achievement differences were recognised.

ADKINS D.C. and others: Pre-school mathematics curriculum project. Final report.
Hawaii University, Honolulu. Educational Research and Development Centre. Pub. date November 1969, 28 pp. ERIC ED 038 168 PS 002 909

*USA: Successful teaching of mathematical concepts

The present project provided for the development of a detailed quantitative curriculum appropriate for use in Head Start classes, trial of the developed materials with pre-school children in Hawaii, and preliminary assessment of the curriculum in comparison with a more spontaneous, informal quantitative classroom experience. Directions for tasks related to number and counting, geometry, dimension, pre-arithmetic operations, and symbols were prepared and revised throughout the school year 1968-69 and presented to 55 children in three experimental classes daily in 20-minute lessons. The tasks were then compiled into a teacher's manual. The Geometric Design, Arithmetic, and Block Design sub-tests of the WPPSI; an experimental form of the Head Start Arithmetic Test; and two Piagetian conservation tasks were administered to the experimental subjects and 30 subjects in two comparison classes to measure mathematical knowledge and understanding. The mean scores on the WPPSI sub-tests for the experimental classes were all above the standardised norms and consistently higher than for the comparison classes. The differences were statistically significant on the Geometric Design and Block Design sub-tests. The net gain on the Head Start Arithmetic Test were also significantly greater for the experimental group than for the comparison group.

6.0 TEACHERS

KATZ L.G., WEIR M.K.: Staffing pre-schools: background information.
ERIC Clearinghouse on Early Childhood Education, Urbana, Ill.; National Lab. on Early Childhood Education. Pub. date March 1969, 8 pp. ERIC ED 034 589 PS 002 598

*USA: Qualifications of pre-school teachers

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is on the special learning problems of Mexican-American children and the development of bilingual competence. A total of 98 3- and 4-year-old migrant children participated during 1968-69. Programme evaluation is viewed as a continuing process. Part of this evaluation was a pre- and post-testing on the Pre-school Attainment Record (PAR) of 2 groups of children, a migrant group from the Early Childhood Education system and a non-migrant group from regular day care centres. On the pre-test, the non-migrant children scored higher. However, the post-test showed that the children in the experimental programme made greater developmental gains than the other children. Children whose teachers had high scores on the Minnesota Teacher Attitude Inventory performed better on the PAR than students whose teachers had low scores. Parents who participated in the parent activities scored higher on an educational attitude scale than non-participating parents.

NIMNICHT G. and others: Preliminary analysis of 1968-69 Head Start data.
Far West Lab. for Educational Research and Development, Berkeley, Calif. Pub. date 23 July 1970, 26 pp.
ERIC ED 045 203 PS 004 020

*USA: The importance of teaching ability, ample facilities and an atmosphere free of stress

Eight Head Start centres which used the Responsive Model programme during the 1968-69 school year were assessed to determine cognitive development of children, teacher performance in the classroom, adequacy of physical facilities, administrative support and the inter-relationship between these variables. Teachers were observed at the beginning and end of the school year and rated on a scale designed to indicate the degree to which they implemented the procedures of the Responsive Model. Findings indicated that the majority of teachers increased their teaching skills and became more consistent with the Model criteria. The Pre-school Inventory (PSI) measuring achievement in skills and concepts, was administered on a pre-post basis to 761 children, and average scores in all eight communities demonstrated growth throughout the year. Year-end scores for the Responsive Model children were at national norm levels reported for middle-class children. (A limitation of the PSI is its less than adequate norms.) Changes in child test performance were greatest in classrooms with adequate physical facilities, in situations with few administrative problems and where teacher performance was consistent with Responsive Model Objectives. When measured by PSI changes, child growth was greatest for those in classes whose teachers demonstrated a high level of teaching ability.

helping strategies. Expansion and strengthening of the Regional Training Office of Head Start would increase the in-service helping resources already available.

COLLINS C.: The itinerant teacher.
California State Dept. of Education, Sacramento.
Pub. date /1970/, 10 pp. ERIC ED 045 191
PS 003 656

*USA: Travelling teacher to provide on-the-spot training for teachers

The use of a travelling teacher is one solution to the problem of providing on-the-spot training for Head Start teachers in small rural communities in remote regions of northern California. The State Department of Education, funded through a grant to Chico State College, implemented a staff development programme whose chief feature was use of an itinerant teacher who spent one week in each of eight classrooms in six counties. In addition to giving practical helps in class, she taught a workshop course for which Chico granted one unit of lower division credit. The classes visited differed greatly in size, structure, ethnic composition and staff background. The teacher responded to each centre's particular needs and wishes, working with both teaching and non-teaching personnel to help them plan and evaluate daily activities, arrange schedules and room organisation, use classroom and community resources more creatively, and develop techniques helpful in working more effectively with children and parents. The itinerant teacher, on an extended contract, later prepared a manual to be used in those classrooms where she had worked. Recommendations for the continuation of the programme and specific suggestions for its improvement are made.

Early childhood education learning system for three- and four-year-old migrant children, McAllen, Texas. Evaluation report, 1968-69. Southwest Educational Development Lab., Austin, Tex. Pub. date 31 July 1969, 101 pp. ERIC ED 043 370 PS 003 215

*USA: Value of skilled teachers and of parental interest

This document reports on a programme seen as an integral part of a total educational development plan for migrant children. The Early Childhood Education Learning System is an instructional programme which includes staff development and parent-school-community involvement. Focus

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8.0 OVERVIEWS AND BROAD ISSUES

TROUILLET B.: L'éducation préscolaire: quelques aspects et problèmes internationaux, International Review of Education, XVI/1970/1, pp 7-23

*International overview

The considerable rise in pre-school education in certain countries brings about the need for a close study of the structural and pedagogical conditions to which it is subject. The educational value of this sphere of teaching, stressed by the results of research in modern psychology, shows its importance when it comes to achieving, as efficiently and as early as possible, the basic principles which are behind any school reform: the democratisation of education and the furthering of individual talents. The development of the skills and the needs of the child before compulsory schooling should, however, be considered within the framework of a co-ordination of the educational aims and actions of pre-school and primary education.

These countries which are lagging considerably behind in the field of pre-school education must become aware of their position on both the quantitative and qualitative aspects of this education. It is not simply a question of putting into action financial and other resources necessary for a closely linked network of institutions, but it is also a question of re-thinking pre-school education, renewing its content and methods, and stressing its propaedeutic, compensatory and therapeutic functions. This article outlines the general state of pre-school education in some European countries and in the United States and gives brief mention to some of the problems and tendencies that have been observed.

TROUILLET B.: Die Vorschulerziehung in neun europäischen Ländern (Pre-school education in nine European countries), published by Julius Beltz, Weinheim, 1967, 238 pp.

*European overview

This is a comparative study of pre-school education in Belgium, Denmark, England and Wales, France, Italy, the Netherlands, Austria, Sweden and Switzerland. Each country report deals with the organisation of pre-school education, its finance, the teachers, the facilities, the school inspection, the programmes and, finally, the present trends and developments. Statistical data are given for each country. A comprehensive bibliography concludes the publication.

Project Head Start at work. Report of a survey study of 335 project Head Start Centres, Summer, 1965. Institute for Educational Development, New York, N.Y. Pub. date April 1966, 56 pp. ERIC ED 036 311 PS 000 290

*USA: Value of male teachers at the pre-school level

A national observer team surveyed 335 Head Start Centres during an 8-week summer period to locate useful innovations and developments in pre-school education methods which might have future implications for the whole educational system. Team reports agreed that the programmes had been more successful in bolstering the social and emotional needs of the children than in the advancement of their intellectual skills. The interaction of the pre-schoolers with their teachers and teacher aides, whether these were teenagers or adults, was critically important in establishing an acceptable learning environment. Contact with older persons able to respond quickly to children's questions and needs for attention encouraged and reinforced development. Male teenage aides were especially valuable as many of the children did not have satisfactory father contacts at home. It was generally agreed that the essential training and experience in pre-school education could be given in in-service programmes or in short institute sessions. Learning by doing was stressed by all Centres, and adolescent, parent, and community involvement in the educative process was suggested by the survey report.

7.0 FINANCE

VON RECUM, DÖRING P.A., SCHÖPPE G.: Der Finanzbedarf eines expandierenden Vorschulsystems (The financial requirements of an expanding pre-school system). German Institute for International Educational Research, Frankfurt/Main. Educational Research European Survey 1970

*FEDERAL REPUBLIC OF GERMANY: Research project into the financing of pre-school education

Preliminary estimate of the financial requirements of an expanding pre-school system in the Federal Republic of Germany with alternative assumptions and possibilities for its coverage.

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*Statistics concerning pre-school enrolment in the USA

This study, based on information collected by the U.S. Bureau of the Census in its Current Population Survey, shows the number of children 3 to 5 years old in the United States and the extent of their enrolment in public and non-public pre-primary programmes. In 1968 the gap continued to close between white and non-white children enrolled in pre-primary programmes, reflecting the influence of State and Federal pre-school projects in poorer areas. As age increased, enrolment rates increased, but the proportion enrolled in private schools decreased. As family income rose, enrolment increased, with the highest percentage in the "$10,000 and over" group. A higher percentage of non-white children than white children from the lower income groups was enrolled, and for all regions of the country, non-white enrolment was higher. Enrolment rates for non-whites were higher than for whites in white-collar and manual service occupations. Children in farm families had the lowest enrolment rates, while children in white-collar families had the highest enrolment. The enrolment rate of non-metropolitan residents continued to be lower than that of central city or suburban residents. /There was a yearly rise in the total number of 3-5 year-olds enrolled despite a yearly decline in the population of this age group. In 1968 33% of this population was enrolled compared with 25.5% in October 1964./

Conference on pre-school education, papers and reports. Organised by the Working Group on Pre-school Education at Hannover, 16 - 20 September 1970, published by Friedrich-Verlag, Velber b. Hannover.

*Overview of pre-school education in the Federal Republic of Germany

The Conference aimed at taking stock of the present situation of pre-school education in the Federal Republic of Germany, and, at the same time, at giving an overview of new research results and of various experimental programmes serving as pilot projects for the reform of pre-school education. The Conference, which was attended by some 5,000 teachers, students and parents, belonging to very different political and pedagogical groupings, was in agreement only on one point: more pre-school education is needed since at present only one-third of the children in the Federal Republic can be accommodated in kindergartens. There was no general consensus on what the new pre-school education should be. The research results are controversial and the experiments actually undertaken are limited to individual projects. Fifteen working parties discussed particular problems of pre-school education on the second

O'BRIEN R.A., LOPATE P.: Pre-school programmes and the intellectual development of disadvantaged children. ERIC Clearinghouse on Early Childhood Education, Urbana, Ill. Pub. date 1968, 14 pp. ERIC ED 024 473 PS 001 368

*Description of the Head Start project

Evidence indicates that disadvantaged children are intellectually inferior to middle-class children at the time they enter school; and as school continues, the gap widens. The environment of the disadvantaged child lacks much of the opportunity and stimulation for intellectual growth present in the middle and upper-class environments and generally necessary for academic success in school. Compensatory pre-school education for the disadvantaged child has been created to alleviate the gap, at least partially. Project Head Start was the first wide-scale attempt to promote the intellectual growth of the disadvantaged pre-schooler. Some early evaluations of the Head Start programme indicated which aspects of any such programme contribute the most to substantial intellectual growth; namely, (1) a warm, supportive, and stimulating teacher; (2) a task-oriented programme approach; (3) an academically oriented programme format; and (4) an emphasis on verbal development.

TROUILLET B.: Vorschulerziehung in den USA (Pre-school Education in the USA), published by Julius Beltz, Weinheim, 1970, 128 pp.

*An overview of pre-school education in the USA

The study gives an overview of the present state and the new developments in American pre-school education. It reports on the traditional pre-school education as it developed. It then goes on to summarise recent research projects and their results, and deals in its final part with the new projects concerning compensatory education and, in particular, the Head Start programmes. In this context, it describes in particular the programmes of Bereiter/ Engelmann, of the Office of Economic Opportunity and of the Early Teaching Project, and summarises the publications which have been devoted to the pros and cons of these programmes.

NEHRT R.C., HURD G.E.: Pre-primary enrolment of children under six: October 1968. Spons Agency - Office of Education (DHEW), Washington, D.C. Bureau of Elementary and Secondary Education. Pub. date June 1969, 23 pp. ERIC ED 032 118 PS 002 101

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day of the Conference, whereas the third day was devoted to reports on six pilot projects which ranged from a Catholic kindergarten at Freiburg to an anti-authoritarian kindergarten in western Berlin. The Conference reports give a summary of the discussion. Amongst the main points discussed was the necessity to have an objective evaluation of the manifold audio-visual media now offered to pre-school education and demonstrated at a fair connected with the Conference. Another point was the discrepancy between pre-school research and pre-school experiments which are not co-ordinated.

Deutscher Bildungsrat (German Education Council).- Empfehlungen der Bildungskommission (Recommendations of the Education Committee).- Strukturplan für das Bildungswesen (Educational Reform Plan), published by Ernst Klett, Stuttgart, 1970, 398 pp.

*Proposed reforms in pre-school education in the Federal Republic of Germany

The educational reform plan, submitted by the Education Commission of the German Education Council, is the result of four years of intensive committee work supported by a great number of studies commissioned from researchers in the Federal Republic. The reform plan deals also with pre-school education under its various aspects: organisation and finance, curriculum and training of pre-school teachers. It proposes long-term goals for reform and development up to 1980 and a medium-term programme. It advocates compensatory education for the disadvantaged and a broad expansion of pre-school education for the three to four-year-olds so that some 75% may be accommodated in kindergartens. At the same time the school entrance age should be reduced to five. The main argument on which this expansion of pre-school education is based is taken from new psychological and sociological research which has proved that ability and environment closely interact. The aim of pre-school education must therefore be to build up an educational environment which challenges the emotional and cognitive development of the child.

HOLMSTROM G.: Nordisk Barnträdgardskongress i Uppsala (Le congrès nordique sur les jardins d'enfants tenu à Upsal), Skolnylt, no. 17, Pub. date 15 September 1968, 319 pp.

*Scandinavian overview

Compte rendu de la réunion des jardinières d'enfants nordiques tenue tous les quatre ans. Conférences. La pédagogie spéciale. Le problème des enfants handicapés. Le nombre des enfants. La formation sociale des maîtres.

Sammandrag av de nationella rapporterna om förskoleuppfostran (Rapports nationaux sur l'enseignement pré-scolaire en Finlande), Skolnytt, no. 17, 15 septembre 1969, 332 pp.

*Finnish overview

Le début de la scolarité obligatoire. L'organisation de l'enseignement pré-scolaire. Le financement. La sélection des élèves. Le corps enseignant et l'importance de sa formation.

SALVADO SALPAIO J.: Ensino infantil em Portugal (Enseignement pré-scolaire au Portugal), Boletim bibliografico e informativo (Fondation Gulbenkian), no. 8, 1968, pp 76-105

*Pre-school education in Portugal

Les jardins d'enfants, les écoles maternelles au Portugal. La formation des éducateurs spécialisés. Cette étude est un historique de ce type d'enseignement au Portugal, ainsi qu'un panorama très complet de l'enseignement pré-scolaire dans son état actuel. Une comparaison avec plusieurs pays européens et avec les Etats-Unis termine l'article.

HECHINGER F.M.: /New York Times/ Education: the pre-school child and education: triumphs and doubts, in: Salisbury, Harrison E. ed. Anatomy of the Soviet Union, London, Nelson, 1967, pp 79-92 and 93-124.

*Pre-school in the USSR

The organisation and teaching methods of the Soviet kindergarten are described and assessed against the general setting and goals of Soviet education, with its emphasis on group activity and co-operation. There are references to Makerenko and his view that "discipline in the group is a full guarantee of the rights and potential of each individual". The author sees the Soviet system as a huge, centrally controlled machine, generally successful in specific goals but held back by a deep professional conservatism. The main developments in Soviet education are reviewed, ranging from the drive for literacy immediately after the Revolution to the recent reaction to the reforms initiated by Krushev. The importance of parental support and the tendency for Soviet parents to be very possessive of their children in a society where it is not encouraged to be possessive about anything else are noted. The main weakness in the system, which is given

much credit for its achievements, is considered to be the "wait for orders" attitude among teachers at all levels. This deprives pedagogy of "innovation-minded leadership". In a similar manner, pupils and students suffer from lack of opportunities for discussion, controversy and analysis.

Children in their primary schools: A report of the Central Advisory Council for Education (England), HMSO, 1967, Vol 1, 556 pp., Vol. 2, 633 pp.

*Proposals concerning pre-school education in England and Wales

Although primarily concerned with the primary stage of education (children in full time education below the age of 11 years), the report discusses matters concerning the child who has not yet reached compulsory school age. Aspects of child development and of environmental influences are reviewed. Attention is drawn to the limited provision made for pre-school education in England and Wales. The report recommends a large expansion of nursery education and this to be made as soon as possible. A part-time rather than whole-time system is favoured with children being introduced gradually to nursery education. Nursery education should be available for children from three years of age to five years of age in nursery groups of 20 places. Nursery groups should be under the ultimate supervision of a qualified teacher in the ratio of one qualified teacher to 60 places. The main day to day work of the groups should be undertaken by two-year trained nursery assistants in the ratio of a minimum of one to every ten children. Nursery groups should be provided, in the long run, by local education authorities, but until enough maintained places are available the local education authorities should encourage nursery groups run by non-profit making associations.

ORLANDO D.: Pedagogia dell'infanzia e scuola materna
Brescia, Ed. La Scuola, 1970, 201 pp. L. 1.400
(Collana "Infanzia e Educazione")

*Pre-school education in Italy

La première partie de l'ouvrage met en relief les rapports entre la famille et l'école, les contributions offertes par la psychologie à l'éducation de l'enfant.

Dans la seconde partie, le sujet est abordé sous un angle plus spécifiquement pédagogique.

La troisième partie, consacrée à la méthodologie et à la didactique particulières de l'école maternelle, examine tous les aspects de l'éducation de l'enfant.

L'oeuvre se termine par une brève étude commentée des programmes pour les écoles maternelles italiennes.

Grundschulkongress 1969, Vol. I: Begabung und Lernen im Kindesalter (Ability and learning in early childhood), published by Arbeitskreis Grundschule e.V., Frankfurt am Main, Schlossstr. 29, 1970, 292 pp.

*FEDERAL REPUBLIC OF GERMANY: General discussion of problems facing pre-school education

The publication comprises all the papers which were delivered at the Conference on primary education organised at Frankfurt from 2-5 October 1969. It dealt in particular with the problem of the pre-school classes for the five-year-olds who do not yet come within the compulsory education system which in the Federal Republic begins at the age of six. Reports were given on the various experiments with such classes in the Länder of the Federal Republic aiming at developing a two-year entrance stage for the five and six-year-olds as part of the primary school. In this context particular attention was paid to the problems of early instruction in reading, the didactics of such pre-school classes, and the relationships between the learning processes in early childhood and the curriculum development. The papers on the main themes are followed by summaries of the discussion.

9.0 BIBLIOGRAPHIC SOURCES

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